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Self Help Guide



*Information and Support for those
involved in and affected by the Persian Gulf War*

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SELF-HELP GUIDE for GULF WAR ILLNESSES

Chapter 1 INTRODUCTION

Thank you for your interest in the 5th edition of the National Gulf War Resource Center's (NGWRC) *Self-Help Guide for Gulf War Illnesses*. If you are an ill Gulf War veteran or a family member or friend of such a person, you should find this *Guide* highly useful in understanding research and legislative developments and how to get help and support. We distributed over 30,000 copies of our last edition of the *Guide*, and by now there have been more than 150,000 visits to our website to view the *Guide*. Free copies are available at many Veteran's Administration medical centers, veteran's service organizations such as the VFW and others listed in this document, and state and local government offices providing assistance to veterans. Please visit our website for constant updates regarding important developments in research and benefits.

I. NGWRC Mission and Background

The National Gulf War Resource Center (NGWRC) is an international coalition of advocates, organizations, and members providing information, support, and referrals for all those concerned with the complexities of Persian Gulf War issues, especially facts about Gulf War Illnesses and service members who have yet to return home. In 1995, we became a formal non-profit entity as 17 grass roots veterans groups across the country formed a coalition to get their health issues addressed in Washington, D. C. By 2003, NGWRC has represented as many as 60 groups in the U. S. and the United Kingdom. We have held national conferences every year since incorporating in 1995.

The NGWRC has consistently brought Gulf War issues before Congress and the media, exposing the whole truth about Pentagon policies that severely impacted veterans and their families. Our most valuable efforts have resulted in legislation that required research and service-connected disabilities for certain conditions associated with Gulf War service. Additionally we have been directly responsible for recent Congressional hearings, which resulted in DoD omissions that policies designed to protect soldiers of the current war in Iraq were being ignored. NGWRC receives grants from the Vietnam Veterans of America and other individual contributors, but no government funding.

II. Summary of Updated Material

Both the VA and DoD now recognize that Gulf War Veterans are ill. It is noted that they suffer from a pattern of health problems that significantly exceeds those seen in comparable populations, beyond that which is explained by stress or psychiatric diagnoses.

Different epidemiological studies consistently show 25-30% of the veterans who served in the Gulf are ill, over and above the control population chosen for any study. It is increasingly evident that at least one important category of illness in Gulf War veterans is neurological in character. There is enough evidence at present to conclude that this line of inquiry represents a potential breakthrough that is aggressively being pursued.

The VA has sent a message to its researchers that Gulf War Illnesses is an area ripe for important discoveries. That there is honor in this work. Not only to improve the health of veterans of the Gulf War, but to protect American troops and civilians in the future. The message to veterans is that science is finally beginning to unravel the mysteries of Gulf War Illnesses. The NGWRC is committed to pushing for and following new science, medical breakthroughs, and new treatments.

III. Description of Gulf War Illnesses

“Gulf War Illnesses” has come to be the appropriate and accepted term to describe a collection of overlapping symptoms resulting from one or more exposures to toxic substances (examined in the “Exposures and Research” section of this Guide). This term replaces the former “Gulf War Syndrome” (still expressed by some) which has implied that stress was the primary cause of Gulf War veteran ailments. In recent years, the Veterans Administration in particular has departed from the older connotation as conclusions from non-governmental studies and closer analysis of government reports have overtaken denials of real physical problems. In its June 2002 Interim Report, the Veterans Administration (VA) Research and Advisory Committee (RAC) on Gulf War Illnesses stated that these conditions are very often neurological, not psychological, in nature. www.appcl.va.gov/rac-gwv-gwvi/

The multiple toxins present in the Gulf War theater of operations created considerable confusion among veterans, researchers, and the public, making it difficult to provide a single case definition or effective treatments.

The Kansas Health Institute completed the only state-sponsored study of Gulf War Illnesses in 2000, and the study agreed with the VA’s RAC conclusions that Gulf War Illnesses are a major health problem for veterans who deployed to the theater. The Kansas study identified six types of symptoms associated with Gulf War service:

- A. Neurological (memory, headache, mood, dizziness problems)
- B. Fatigue and sleep disorders
- C. Pain in joints and muscles
- D. Gastrointestinal (diarrhea and nausea)
- E. Respiratory (persistent cough and wheezing)
- F. Skin (rashes and other problems)

This random telephone study of Kansas Gulf War veterans, which was published in the November 15, 2000 issue of The American Journal of Epidemiology, noted that deployed Gulf-era veterans were two to five times more likely to report having the above symptoms compared to non-deployed veterans. The tendency of deployed veterans to have multiple symptoms (3-6) on a chronic basis was referred to as “Gulf War Illness.” The Kansas study also showed differences in symptom severity based on branch of service, time in theater, and specific in-theater locations. Additionally, this research demonstrated that health problems from vaccines existed even in those who did not deploy - important information for later-serving service members.

Dr. Robert Haley (http://www.swmed.edu/home_pages/epidemi/gws/) and colleagues at UT Southwestern have been conducting epidemiologic, clinical and laboratory research on the "Gulf War syndrome" and related neurologic illnesses in Gulf War veterans since March 1994. The work has been supported by a continuing grant from the Perot Foundation and by a cooperative agreement with the U.S. Department of Defense. The objectives of the research are to define new or unique clinical syndromes among Gulf War veterans, determine their causes, identify areas of damage or dysfunction in the brain and nervous system responsible for the symptoms, develop a cost-effective battery of clinical tests that can diagnose the illness, search for underlying genetic traits that might predispose to the illness, and perform clinical trials of promising treatments.

The initial studies identified three primary syndromes in a Naval reserve construction battalion (seabees) that appear to be unique, demonstrated that the syndromes are associated with subtle dysfunction of the brainstem and lower parts of the brain, and found epidemiologic associations between the syndromes and risk factors of exposure to combinations of chemicals in the Gulf War.

Genetic studies have identified a genetic trait (PON1 enzymes) that may explain why some soldiers sustained brain damage from exposure to neurotoxic chemicals while others working alongside them remained well. Most recently, research using magnetic resonance spectroscopy has demonstrated a loss of functioning brain cells in deep brain structures of ill Gulf War veterans. Additional commentaries by Dr. Haley have challenged the government's stress theory of Gulf War syndrome and findings of no difference in mortality, hospitalization and birth defects between Gulf War-deployed and nondeployed military populations. Additional research and publications are in process.

1. A list of the papers published in peer-reviewed scientific journals.
<http://www.swmed.edu/home_pages/epidemi/gws/page1.htm>
2. Findings showing that there is a Gulf War syndrome, it is due to organic neurologic dysfunction, and it is associated with exposure to combinations of chemicals in the Gulf War. <http://www.swmed.edu/home_pages/epidemi/gws/page2.htm>
3. Dr. Haley's refutation of the stress theory of Gulf War illness.
<http://www.swmed.edu/home_pages/news/nostress.htm>
4. Dr. Haley's refutation of government research showing no increase in mortality, hospitalization, or birth defects in Gulf War veterans compared with the nondeployed military population <http://irweb.swmed.edu/newspub/newsdetl.asp?story_id=61>
5. Findings on the genetic predisposition to Gulf War Syndrome.
<http://irweb.swmed.edu/newspub/newsdetl.asp?story_id=144>
6. Findings linking dizziness in Gulf War Veterans to subtle brain injury.
<http://irweb.swmed.edu/newspub/newsdetl.asp?story_id=229>

Another non-scientific survey of more than 10,000 ill veterans by the Operation Desert Shield / Desert Storm Association found eleven symptoms shared by at least 80% of surveyed veterans – sleep problems, mood swings, short-term memory loss, chronic fatigue, rashes, aching joints, headaches, abdominal pain, sensitivity to bright light, blurred vision, and diarrhea.

IV. Lack of Data

The failure of the Pentagon and Veterans Administration over the past decade to be candid with veterans about the number and extent of toxic exposures seriously complicated the ability of various interested parties to understand Gulf War Illnesses. At the request of the NGWRC, the DoD established a hotline for veterans to call with information regarding toxic exposures and incidents. The activities of Pentagon office that administered the hotline (Office of the Special Assistant for Gulf War Illnesses) have now been incorporated in a much less visible way under the auspices of DoD's Deployment Health Support Directorate.

The first example of Pentagon non-cooperation that exacerbated suffering for veterans and their families was the constant denials, until 1996, of any health risks from widespread exposure to low levels of chemical agents. After initially indicating exposures for a few dozen veterans, estimates were revised upward every few weeks or months until the Pentagon concluded that 140,000 veterans had been exposed to chemical agents. The second major area of missing data concerned the Pentagon's denial, until 1998, that as many as 436,000 troops were exposed to radioactive depleted uranium contamination. The fact that the Pentagon did not keep adequate records of service members receiving investigational new drugs (botulium toxoid and anthrax shots, and pyridostigmine bromide tablets) constitutes the third major area of missing data problems. For other exposures such as oil well fires, pesticides, and endemic diseases, the Pentagon failed to record the type, amount, and length of time service members faced these toxicities.

V. Gulf War Veterans Information System

Department of Veterans Affairs established the "Gulf War Veterans Information System" (GWVIS) in 1997 to identify and monitor benefit use among Gulf War veterans.

VA's quarterly GWVIS reports are produced in compliance with the "Veterans Health Care Act of 1992" (Public Law 102-585). The National Gulf War Resource Center supports this law and thanks VA for producing these highly reliable reports.

VA's August 2003 GWVIS report, published by VA on September 22, 2003, provides official government statistics on the health impact of the Gulf War. These official counts reveal that 65 percent of "Gulf War Conflict" veterans sought healthcare from VA since 1991. This is very strong evidence that there are serious health problems among these veterans.

Here's a sample of VA statistics related to "Gulf War Conflict" veterans --those who served in Southwest Asia between August 2, 1990, and July 31, 1991. These veterans are often called "Operation Desert Shield" and "Operation Desert Storm" veterans.

- 696,841 US service members served in the Gulf War Conflict.
- 594,549 (85%) "Gulf War Conflict service members" are discharged from the military and are now "Gulf War Conflict veterans." These Gulf War Conflict veterans are eligible for VA medical care and disability benefits. The remaining 102,292 (15%) "Gulf War Conflict service members" remain on active duty in the military and aren't yet eligible for VA benefits.
- 389,192 (65%) Gulf War Conflict veterans sought VA medical care at the VA (for any reason). This count excludes medical care by the military or by private physicians.
- 218,328 (37%) of the eligible Gulf War Conflict veterans filed a claim against VA for military service-related medical disabilities (not all disabilities are related to the war; but all disabilities are related to military duty).
- 172,066 (29%) Gulf War Conflict veterans have approved disability claims (where the claim was approved in whole or in part). Of those with approved claims, 127,745 are receiving compensation or pension payments from VA (the rest aren't disabled enough to receive payments, or they may be military retirees who aren't allowed to receive both VA payments and military retirement).
- 20,371 (3%) Gulf War Conflict veterans still have disability claims awaiting a decision by VA.

Veterans from the United Kingdom, Canada, Australia, the Czech Republic, and other coalition countries also report Gulf War veterans' illnesses. However, there are no official statistics published by other governments

A. Civilians

Civilians present during the Gulf War had many of the same exposures as military personnel to chemical, biological and radiation contamination, endemic infectious diseases, and other toxic materials. Civilian participants include journalists, DOD contractors (such as logistics assistants representing the defense industry), Red Cross workers, and Iraqi and Kuwaiti civilians living in the area.

Other civilians possibly exposed include those at or near Coalition or U.S. military bases or contract facilities who cleaned and repaired returned tanks and airplanes, repackaged returned parachutes, sorted, cleaned, repaired and painted returned equipment, and removed clothing and equipment from the evacuated, injured and dead. The government's response to ill civilians has been very slow. Although some may be eligible for workers' compensation or Social Security benefits, the evidence needed to show

exposure to contaminated personnel or equipment is difficult to provide, and scientific studies relating to civilian participants is still almost non-existent. The NGWRC actively shares information with deployed civilians to obtain answers and medical care, and we continue to press for research into the health problems reported by civilians. (see- www.gulflink.osd.mil/retrograde-equipment)

B. Family and Close Living Contacts

A survey of 1,200 ill veterans performed in 1994 by former U.S. Senator Donald Reigle reported that 77% of spouses and 68% of children born after the war were experiencing Gulf War Illness symptoms or birth defects. Other surveys indicated similar disturbing trends. While not scientific studies, these surveys show an incidence of illness among family members of ill veterans. The Association of Birth Defect Children (ABDC) is conducting a research study on this issue. Those with information regarding a Gulf War veterans' child with birth defects should contact ABDC in Florida at (407) 245-7035. (see: www.birthdefects.org)

A possible source of problems for families and close contacts may have been exposure to the veteran's equipment contaminated during Gulf War service. Another risk factor may be infectious diseases contracted by the veteran while overseas.

Female spouses of Gulf War veterans have reported a high rate of miscarriages, menstrual difficulties, reproductive problems, and burning semen during intercourse. Several other studies are currently being conducted on birth defect rates and burning semen.

Spouses of active duty personnel are eligible for medical care through the DoD. A small number of spouses and children of Gulf War veterans are receiving only health exams (not medical care or disability benefits) through the VA. For information on this program, call the VA at (800) PGW-VETS. (Note: In some cases spouses or children of veterans may receive VA benefits, usually when the veteran is seriously disabled or deceased -- please contact your veterans representative for details.) The NGWRC pressed for an extension of the program in 1998, when it was set to expire. Due to NGWRC's efforts, the program was extended until December 31, 1999. There is no healthcare or compensation program for ill family members of sick Gulf War veterans. Due to the documented slow response of the VA to implement the program (based on a GAO report), the NGWRC is pressing for another extension of the program.

C. Communicability and Blood Ban

In 1991, a ban on all blood donations from veterans was initiated by the DoD to protect the U.S. public from exposure to a variety of new and old infectious diseases. By 1993, the National Association of Blood Banks (NABB) lifted the ban, claiming the public health threat no longer existed. There is no consensus on the communicability of illnesses related to the Gulf War. In 1994 the National Institutes of Health recommended an investigation of the reestablishment of the blood ban.

Some medical researchers and veterans groups, including the NGWRC, have found specific primary and opportunistic infections prevalent among Gulf War veterans. The NGWRC believes it is prudent that veterans consult with a health care provider before donating blood, blood products, or organs. According to the Red Cross (800-272-2048) there is only a one year ban on all blood donations for all troops that have served in the Greater Persian Gulf War Region in the current Operation Iraqi Freedom..

VI. Current Concerns

The NGWRC expressed concern for reported mysterious illness coming out of Iraq. See - <http://www.ngwrc.org/article.asp?id=213>

We were told that DoD would send teams to Iraq to pinpoint the illness and report findings to the families of the soldiers who have recently passed away. The NGWRC is working behind the scenes with DoD and other agencies to help the family get all the details.

Chapter 2 POSSIBLE CAUSES OF GULF WAR ILLNESS

I. Biological agents:

- Anthrax
- Brucellosis
- Possible viral or DNA-altered organisms

II. Chemical and biological weapons :

- Nerve agents: Sarin, Soman,
- Tabun Blister Agents: Mustard Gas, Lewisite

III. Experimental Drugs And Vaccines:

- Pyridostigmine Bromide
- Botulinum Toxoid Vaccine
- Anthrax Vaccine

IV. Depleted Uranium (DU):

- Dust from DU

V. Environmental Exposures:

- Diesel fuel
- Diesel fumes
- Pesticides/insecticides
- Chemical agent resistant coating (CARC)
- Paint
- DEET

VI. Other factors :

- Leishmaniasis
- Brucellosis
- Cholera

Among the theories being examined as possible causes of Gulf War Illness are:

- Multiple low dose exposures to chemical weapons.
- Deleterious effects flowing from sarin filled vaccines and/or oral medications including pyrodestigmic bromide.
- Some synergistic combinations of some or all of the above.

Recently reported research regarding ALS suggests the possibility of a genetic predisposition to motor neuron vulnerability and an apparent increase in the rate of incidence of the disease. This suggests that toxic exposures in low doses has been continued in post-war civilian settings resulting finally in the onset of ALS. Pending ultimate scientific validation of this hypothesis it is very important that Gulf War vets guard against additional casual exposures to threatening chemical compounds, chiefly pesticides.

Chapter 3 EXPOSURES AND ILLNESS RESEARCH

Many developments have taken place since our Fourth Edition of the Guide . Most significantly, the research on sarin and pesticides now shed some light on the previously obscure role of these substances in Gulf War Illnesses. Veterans should report any of these toxic exposures listed below to their healthcare provider as well as to the DoD or VA as part of any claim for benefits. The following statistics regarding exposures were compiled from DoD and VA reports.

<u>I. Type of Exposure</u>	<u># Exposed</u>
Chemical Warfare Agents	100,000
Pyridostigmine Bromide (PB) Pills	250,000
Botulinum Toxoid Vaccine	8,000
Anthrax Vaccine	150,000
Depleted Uranium (DU)	436,000
Oil Well Fire Pollution	696,000
Local Diseases	Unknown

Other exposures include pesticides, diesel fuels, and chemical agent resistant coatings (CARC). A complete list of the known and suspected toxins is available at our website. Clearly, as many researchers comment, the Gulf War theater was a "toxic soup" or "toxic cocktail" mixture that is associated with the illnesses among Gulf War veterans. The following pages provide a much more detailed explanation of several of the major exposures faced by veterans. If you believe your blood is contaminated, you need to notify your health care provider.

II. Chemical Warfare Agents

Historical Perspective – The NGWRC, our member groups, and many individual veterans uncovered documented chemical incidents and casualties using the Congressional reports, the Freedom of Information Act (FOIA), and information provided to us from individual veterans. As a result, by 1997 the DoD was forced to admit 100,000 U.S. troops were exposed to low-levels of sarin, cyclosarin, and mustard agents during the demolition of an Iraqi military bunker complex at the Kamishiyah depot in March 1991. In 1999, the VA increased the number to more than 124,000 and eventually to over 140,000. This clearer picture emerged, in part at least, because NGWRC exposed DoD statistical manipulations that demonstrated flawed modeling and understanding.

The NGWRC research campaign resulted in the DoD revamping their entire Gulf War Illnesses investigation. By 1999, the DoD employed a staff of more than 150 to investigate the thousands of toxic exposure incidents, many brought to light by NGWRC research volunteers. Official military documents obtained from Congressional reports, using FOIA, or letter sent by Gulf War veterans have revealed the following:

- The U.S. Departments of State, Defense, and Commerce allowed the shipment of dual-use chemical precursors and technology to Iraq until 1990.

- Possible offensive use of chemical warfare agents by Iraq against Israel, according to Central Command Nuclear, Biological, and Chemical (CENTCOM NBC log) incident log compiled between January and March 1991.
- Possible deployment of chemical warfare agent land mines by Iraq, according to CENTCOM NBC log.
- Deployment of chemicals to southern Iraq and northern Kuwait by Iraq, according to a casualty report on March 5, 1991.
- Exposure of Coalition troops and civilians to chemicals due to Coalition bombings of Iraqi manufacturing and storage facilities during the air war, according to a report and Senate investigation led by former Senator Donald Riegle.
- Exposure of troops to chemicals from artillery and other bombardment and/or exposure of troops to chemicals as a result of post-cease fire demolitions, according to the CENTCOM NBC log.

In spite of the overwhelming evidence of widespread poison gas exposures, the DoD continued to downplay the seriousness of these exposures. Documented evidence suggests the Pentagon possessed prior knowledge, before the air war, of the potential for chemical releases and the subsequent health problems that could be caused by exposure to low-level chemical warfare agents, according to a report prepared by the Lawrence Livermore Laboratory in California.

In 1996, the NGWRC called for the appointment of a special prosecutor from the Department of Justice to investigate the misplacement, concealment, or destruction of government documents related to chemical and biological agent incidents and exposures. As a result of this request, the DoD Inspector General is currently investigating possible DoD wrongdoing. Part of the problem dealing with chemical exposures was the DoD's mistaken doctrine that a soldier must experience visible and severe effects (such as death) when exposed.

As a result of the work of the NGWRC documenting exposures plus research demonstrating effects from low-level exposures, the DoD has funded some medical research and the DoD began reevaluating their low-level chemical exposure doctrine. A law passed in 1998 was intended to provide new chemical alarms, other new equipment, and better training and awareness for soldiers as result of the low-level chemical exposure doctrine review. Full compliance to the law has not yet been achieved in this area.

Status of Investigations and Epidemiological Research – Numerous recent studies have now essentially disproved the DoD notion that only immediately visible, severe symptoms provide evidence of exposure to chemical agents. According to a new study by researchers at the University of New Mexico, Albuquerque, and the U.S. Army

Medical Research Institute of Chemical Defense, Aberdeen, MD, exposure to sarin nerve gas in concentrations too low to produce immediate symptoms causes irreversible brain damage in laboratory rats.

A. Publications

The new findings, published in three scientific articles in the most recent issue of the peer-reviewed journal Toxicology and Applied Pharmacology, supply missing pieces that connect nerve gas exposure in the 1991 Gulf War to memory loss/cognitive dysfunction, weakened immune response, and DNA and behavior abnormalities.

1. GAO Report (GAO-03-833T) on Preliminary Assessment of DoD Plume Modeling for U.S. Troops Exposure to Chemical Agents dtd. June 2, 2003

Gulf War Illnesses: Preliminary Assessment of DOD's Plume Modeling for U.S. Troops' Exposure to Chemical Agents, by Keith A. Rhodes, chief technologist, before the Subcommittee on National Security, Emerging Threats, and International Relations, House Committee on Government Reform.

<http://www.gao.gov/cgi-bin/getrpt?GAO-03-833T>

<http://www.gao.gov/new.items/d03833t.pdf>

<http://www.gao.gov/highlights/d03833thigh.pdf>

The number of U.S. troops exposed to nerve gas after the first gulf war was underestimated because of flaws in how troops were studied, government investigators have concluded.

The computer models used to determine the extent of sarin gas exposure were inaccurate and incomplete. Troops were exposed to sarin, a toxic nerve agent, when a missile arsenal at Khamisiyah in southeastern Iraq was blown up in March 1991. Over the years, the military has raised its estimate of the number of exposed troops from a few hundred to more than 100,000.

Now the General Accounting Office say's the estimate is inadequate.

The GAO told a congressional panel that the computer models, developed by the Department of Defense and the CIA, did not take weather patterns into account. The models also underestimated the height of the plumes sent skyward when the arsenal was destroyed. Defense and CIA modeling underestimated the extent of U.S. troop exposure since the modeling was not accurate enough to draw conclusions.

The VA had received 54,000 claims related to exposure at the munitions site. It has granted 41,000 and denied 7,000. Others are pending.

2. Institute of Medicine

In 1998, the IOM <http://www.iom.edu/project.asp?id=4683> began a series of congressionally-mandated studies to examine the scientific and medical literature on the potential health effects of chemical and biological agents related to the Gulf War. The first study reviewed the scientific literature on depleted uranium, chemical warfare agents (sarin and cyclosarin), pyridostigmine bromide, and vaccines (anthrax and botulinum toxoid) and resulted in the report, [Gulf War and Health Volume I: Depleted Uranium, Pyridostigmine Bromide, Sarin, Vaccines](#).

In February 2001, the IOM convened a subsequent committee, to examine the health effects associated with exposure to pesticides and solvents. This study resulted in the report [Gulf War and Health: Volume 2: Insecticides and Solvents](#).

In March 2003 a third committee was convened to conduct a review of the peer-reviewed literature on the long-term, human health effects associated with exposure to selected environmental agents, pollutants, and synthetic chemical compounds believed to have been present during the Gulf War. The specific compounds may include: hydrogen sulfide, oil fire by-products, diesel heater fumes, gasoline, jet fuels, hydrazine and red fuming nitric acid. [Committee Membership](#)

3. In its September 2000 report, [Gulf War and Health, Volume I](#) (<http://www.iom.edu/Includes/DBLink.asp?ID=8856>) : Depleted Uranium, Sarin, Pyridostigmine Bromide, and Vaccines, an expert committee of the Institute of Medicine also found that exposure to low-level sarin in concentrations sufficient to cause immediate symptoms can produce long-term brain injury with symptoms identical to those of Gulf War Illness. The committee stopped short of attributing veterans illnesses to low-level sarin, however, because they found insufficient evidence proving that exposure to sarin in concentrations below the level that would cause immediate symptoms can produce long-term brain injury. The committee recommended that further laboratory research in animals be undertaken to address this final link.

a. Methods

In the U. of New Mexico study, researchers administered very low doses of sarin to laboratory rats for one hour per day for 1, 5 or 10 days, while observing the rats for signs of immediate effects on breathing, body temperature, activity level and body weight. The experiment was repeated in additional rats living in a high temperature environment. Half the rats in each experiment were sacrificed and tested for evidence of immediate brain cell damage one day after the exposures ended, and the other half were sacrificed and tested 30 days later for delayed, long-term effects.

Results: The study found that none of the sarin-exposed rats had immediate symptoms of nerve gas effects or brain changes at one day after terminating the exposures. However, at 30 days after ending the exposures, the brains in all the sarin-exposed rat groups had marked signs of brain cell damage. The degree of brain cell damage was proportional to

the dose of sarin given and exacerbated by the hot environment. The measure of brain cell damage used in the study was the loss of so-called muscarinic-1 (M1) cholinergic receptors. These are active sites on the surface of brain cells that normally allow the brain neurotransmitter acetylcholine to bind in transmitting brain signals. Loss of M1 cholinergic receptors would cause the brain cells not to respond normally to signals, resulting in symptoms.

“Our results indicate that rats exposed to low levels of sarin, particularly under heat-stress conditions, sustain alterations in muscarinic receptor sites in critical areas of the brain and that most of these alterations appeared long after the exposure occurred,” the study’s authors concluded. “Repeated exposures to levels of sarin that would not be noticed clinically resulted in delayed development of brain alterations that could be associated with memory loss and cognitive dysfunction.”

The brain cell damage in the rats was found only in certain regions of the brain, most notably in the basal ganglia (also called the “striatum” by researchers), as well as in the frontal cortex, the olfactory tubercle and the anterior nucleus. The basal ganglia are vital deep brain structures found to be damaged in ill Gulf War veterans in a 2000 brain imaging study by researchers at the University of Texas Southwestern Medical Center in Dallas. Subsequently, that finding was replicated by brain imaging scientists at the University of California at San Francisco and the San Francisco VA Medical Center.

At the Society of Neuroscience meeting in Washington in late November 2002, other researchers from the U.S. Army Medical Research Institute of Chemical Defense presented additional evidence of long-term brain damage in laboratory animals from low-level sarin and possible potentiation of the damage by pyridostigmine bromide, the active ingredient in anti-nerve gas tablets given to U.S. troops in the 1991 Gulf War. All of these new studies appear to corroborate the findings of studies reported in the early 1990s by researchers at the Indian Defense Research and Development Agency that first studied long-term effects of repeated low-level sarin exposure in laboratory animals. Additional evidence of the link in humans includes:

- Epidemiological surveys from the University of Texas Southwestern and the VA Central Office linking self-reported nerve gas exposure to Gulf War Illness.
- The development of similar symptoms by survivors of the 1995 Tokyo and Matsumoto subway sarin attacks.
- Increased susceptibility to damage from a genetically determined paraoxonase enzyme deficiency in ill Gulf War veterans, reported by several research groups.

b. Other Research

Prior research over the past 20 years has shown that brain cells in the basal ganglia and other deep brain structures are particularly susceptible to damage by chemical warfare nerve agents. DoD funded research at the Hebrew University of Jerusalem demonstrates

that chemical exposures produce altered acetylcholinesterase associated with hyperactivity, memory malfunction, muscle weakness, and greater vulnerability to head injury complications in animals. The Veterans Administration Research Advisory Committee is monitoring and reporting on all the most completed Gulf War Illness research and will have updates on chemical exposure research in the summer of 2003. The section on Pesticides and Solvents in this Self-Help Guide has additional information on the interaction between those substances and chemical warfare agents.

c. Conclusion

The Bottom Line on Sarin: Evidence presented here is what the IOM committee needed to draw a connection between low-level sarin and Gulf War Illness. The IOM committee now has that new evidence and is reevaluating their earlier conclusions. Understanding this exposure will also allow the Secretary of Veterans Affairs to assure current troops that if they get wounded by nerve gas in future wars, the VA system will take care of them.

3. In its February 18, 2003 report, [Gulf War and Health, Volume II](http://www.iom.edu/report.asp?id=5407) (<http://www.iom.edu/report.asp?id=5407>): the second in a series of congressionally-mandated studies by IOM that provides a comprehensive assessment of the available scientific literature on potential health effects of exposure to certain biological, chemical, and environmental agents associated with the Gulf War. In this second study, the committee evaluated the published, peer-reviewed literature on exposure to insecticides and solvents thought to have been present during the 1990-1991 war. Because little information exists on actual exposure levels - a critical factor when assessing health effects - the committee could not draw specific conclusions about the health problems of Gulf War veterans. The study found some evidence-although usually limited-to link specific long-term health outcomes with exposure to certain insecticides and solvents, but in the majority of cases, there was not enough evidence to determine whether an association exists between exposure and certain health effects. The next phase of the series will examine the literature on potential health effects associated with exposure to selected environmental pollutants and particulates, such as oil-well fires and jet fuels.

Although most Gulf War veterans resumed their normal activities, many began reporting a variety of unexplained health problems that they attributed to their participation in the Gulf War, including chronic fatigue, muscle and joint pain, loss of concentration, forgetfulness, headache, and rash. The Department of Veterans Affairs (VA) and IOM reviewed the scientific and medical literature on the long-term adverse health effects of biologic and chemical agents to which the Gulf War veterans may have been exposed. In 1998, IOM and VA contracted for a series of studies that would provide conclusions about the strength of associations between exposure to the agents of concern and health outcomes as observed in the epidemiologic literature. Congress in 1998 passed the Persian Gulf War Veterans Act, PL 105-277, and the Veterans Programs Enhancement Act, PL 105-368 for a study similar to that previously requested by VA. The VA was directed to enter into an agreement with IOM to review the literature on 33 biologic and chemical agents and groups of agents believed to be associated with service in the Gulf

War and to assess the strength of the evidence of associations between exposure to the agents and long-term adverse health effects. The VA secretary was directed to consider the IOM conclusions when making decisions about compensation.

The following agents are listed in PL 105-277 and PL 105-368:

a. Pesticides

organophosphorus pesticides (chlorpyrifos, diazinon, dichlorvos, and malathion), carbamate pesticides (proprathion, carbaryl, and methomyl), and chlorinated-hydrocarbons and other pesticides and repellents (lindane, pyrethrins, permethrins², rodenticides Haiti, and the repellent DEET [N,N-diethyl-3-methylbenzamide]).

b. Pyridostigmine bromide

c. Nerve agents and precursor compounds

sarin and tabun

d. Synthetic chemical compounds

mustard agents, volatile organic compounds, hyclazine, red fuming nitric acid, and solvents

e. Environmental particles and pollutants

hydrogen sulfide, oil-fire byproducts, diesel heater fumes, and sand micro particles

f. Sources of radiation

uranium, depleted uranium, microwave radiation, and radiofrequency radiation

g. Diseases endemic to the region

leishmaniasis, sandily fever, pathogenic Escherichia coli and shigellosis

h. Administration of live, "attenuated", and toxoid vaccines.

In response to VA and Congress, IOM determines that the study would be conducted in phases and that the initial phase would include a review of the agents that were of most concern to the veterans. After meetings with Gulf War veterans, the first TOM Gulf War committee decided that its study would focus on depleted uranium, pyridostigmine bromide, sarin, and vaccines (anthrax and botulinum toxoid).

After reviewing IOM's *Gulf War and Health, Volume I*, the secretary of veterans affairs determined that there was no basis to establish a presumption of a connection between

Gulf War exposure to sarin, pyridostigmine bromide, depleted uranium, or anthrax or botulinum toxin vaccine and various health outcomes. However this finding is currently under expedited review by the IOM. At the request of the NGWRC.

i. Scope of Volume 2

This second volume focuses on long-term adverse health outcomes associated with exposure to insecticides and solvents. The IOM committee began its work by overseeing extensive searches of the peer-reviewed medical and scientific literature. The searches retrieved about 30,000 potentially relevant references which were considered by the committee. After an assessment of the references, the committee focused on about 3000 that analyzed the relevant insecticides and solvents and their long-term adverse health effects in humans. The committee did not review the literature on short-term outcomes, inasmuch as the veterans, their families, VA, and Congress are concerned with health effects that might persist long after exposure ceased and that might require compensation. It should be noted that the charge to IOM was not to determine whether a unique Gulf War syndrome exists or to judge whether veterans were exposed to the putative agents. Nor was the charge to focus on broader issues, such as the potential costs of compensation for veterans or policy regarding such compensation; that policy is the responsibility of the secretary of veterans affairs. The committee's charge was to assess the scientific evidence regarding long-term health effects associated with exposure to specific agents that were potentially present during the Gulf War. Epidemiologic studies that analyzed the relationship between exposure to specific chemicals under review and long-term health outcomes provided the evidence for the committee to use in drawing conclusions of association.

j. Methods

As the committee began its task, the first step was to broadly identify the literature for review. Searches were conducted by using the names and synonyms of the specific insecticides and solvents identified for study, their Chemical Abstract Registry numbers, and the relevant classes of insecticides and solvents. Searches were also conducted on occupations with known exposure to insecticides or solvents (such as pesticide application, painting, and fry cleaning). Finally, background documents and reviews of experimental evidence were retrieved and examined.

The literature search resulted in the retrieval of about 30,000 titles. As the titles and abstracts were reviewed, it became apparent that many of the studies were not relevant to the committee's task. The committee therefore developed inclusion criteria for the studies to be reviewed; for example, there had to be an examination of the agents under consideration, the study design had to be appropriate for the committee's task of weighing evidence, and the study had to be an original study rather than a review or meta-analysis. Results of the studies also had to demonstrate persistent rather than short-term effects. Applying those criteria helped the committee to narrow the 30,000 titles and abstracts to about 3000 peer-reviewed studies that would be carefully reviewed. The studies were primarily occupational studies, of workers exposed chronically to insecticides or

solvents, including studies of Gulf War veterans that specifically examined insecticide and solvent exposure. Examples of studies excluded from review were those which focused solely on the efficacy of insecticide use in mitigating the effects of insect infestation or examined pesticide ingestion and suicide. Similarly, studies of occupations with exposure to multiple agents and those without specificity of agent (for example, farming and agricultural work) were excluded in that it was difficult to determine the agent responsible for an outcome. Case studies of acute poisonings or short-term outcomes were also excluded.

It should be noted that animal studies had a limited role in the committee's assessment of association between exposure and health outcome. Animal data were used for making assessments of biologic plausibility; they were not used as part of the weight-of-evidence approach to determining likelihood that an exposure to a specific agent might have a specific long-term outcome. The animal studies were, however, used as evidence to support the epidemiologic data.

The committee did not collect original data or perform secondary data analysis. It did, however, calculate confidence intervals, when a study did not provide them, on the basis of the number of subjects (cases and controls), the relative risk or odds ratio, or the *p* value.

k. Drawing Conclusions about the Literature

As noted, the committee adopted a policy of using only published, peer-reviewed literature to draw its conclusions. Although the process of peer review by fellow professionals enhances the likelihood that a study has reached valid conclusions, it does not guarantee validity. Accordingly, committee members read each study and considered its relevance and quality.

The committee classified the evidence of association between exposure to a specific agent and a specific health outcome into five previously established categories, as set forth below. The categories closely resemble those used by several IOM committees that have evaluated vaccine safety, herbicides used in Vietnam, and indoor pollutants related to asthma. The first three categories imply a statistical association; the committee's conclusions are based on the strength and coherence of the findings in the available studies. The conclusions represent the committee's collective judgment. The committee endeavored to express its judgment as clearly and precisely as the available data allowed. It used the established categories of association from previous IOM studies because they have gained wide acceptance over more than a decade by Congress, government agencies, researchers, and veterans groups.

However, inasmuch as each committee member relies on his or her training, expertise, and judgment, the committee's conclusions have both quantitative and qualitative aspects. In some cases, committee members were unable to agree on the strength of evidence of an association under review; in such instances, if a consensus conclusion could not be reached, the committee presents their different points of view in the text. The five

categories describe different levels of association and sound! a recurring theme: the validity of an association is likely to vary with the extent to which the authors reduced common sources of error in making inferences -chance variation, bias, and confounding. Accordingly, the criteria for each category express a degree of confidence based on the extent to which sources of error were reduced. The five categories and their rationale are as follows.

1) Sufficient Evidence of a Causal Relationship

Evidence from available studies is sufficient to conclude that a causal relationship exists between exposure to a specific agent and a specific health outcome in humans, and the evidence is supported by experimental data. The evidence fulfills the guidelines for sufficient evidence of an association (below) and satisfies several of the guidelines used to assess causality: strength of association, dose-response relationship, consistency of association, and a temporal relationship.

2) Sufficient Evidence of an Association

Evidence from available studies is sufficient to conclude that there is a positive association. A consistent positive association has been observed between exposure to a specific agent and a specific health outcome in human studies in which chances³ and bias, including confounding, could be ruled out with reasonable confidence. For example, several high- quality studies report consistent positive associations, and the studies are sufficiently free of bias, including adequate control for confounding.

3) Limited/Suggestive Evidence of an Association

Evidence from available studies suggests an association between exposure to a specific agent and a specific health outcome in human studies, but the body of evidence is limited by the inability to rule out chance and bias, including confounding, with confidence. For example, at least one high-quality study reports a positive association that is sufficient free of bias, including adequate control for confounding. Other corroborating studies provide support for the association, but they were not sufficiently free of bias, including confounding. Alternatively, several studies of less quality show consistent positive associations, and results are probably not due to bias, including confounding.

4) Inadequate/Insufficient Evidence to Determine Whether an Association Exists

Evidence from available studies is of insufficient quantity, quality, or consistency to permit a conclusion regarding the existence of an association between exposure to a specific agent and a specific health outcome in humans.

5) Limited/suggestive Evidence of No Association

Evidence from available studies is consistent in not showing a positive association between exposure to a specific agent and a specific health outcome after exposure of any magnitude. A conclusion of no association is inevitable limited to the conditions, magnitudes of exposure, and length of observation in the available studies. The possibility of a very small increase in risk after exposure studied cannot be excluded.

As the committee began its evaluation, neither the existence nor the absence of an association was presumed. Rather, the committee weighed the strengths and weaknesses of the available evidence to reach conclusions in a common format. It should be noted that although causation and association are often used synonymously, the committee distinguishes between “sufficient evidence of a casual relationship” and “sufficient evidence of an association”. An association can indicate an increase in risk without the agent(s) being the sole or even primary cause.

Epidemiologic studies can establish statistical associations between exposure of specific agents and specific health effects, and associations are generally estimated by using relative risks or odds ratios. To conclude that an association exists, it is necessary for an agent to occur with the health outcome more frequently than expected by chance and it is almost always necessary to find that the effect occurs consistently in several studies. Epidemiologists seldom consider one study taken alone as sufficient to establish an association; rather, it is desirable to replicate the findings in other studies for conclusions to be drawn about the association. Results from separate studies are sometimes conflicting. It is sometimes possible to attribute discordant study results to such characteristics as the soundness of study design, the quality of execution, and the influence of the different forms of bias. Studies that result in a statistically significant measure of association account for the role of chance in producing the observed result. When the measure of association does not show a statistically significant effect, it is important to consider the size of the sample and whether the study had the power to detect an effect if it existed.

Study designs differ in their ability to provide valid estimates of an association. Randomized controlled trials yield the most robust type of evidence, whereas cohort or case-controlled studies are more susceptible to bias. Cross-sectional studies, in general, provide a lower level of evidence than cohort and case-control studies. Determining whether a given statistical association rises to the level of causation requires inference. To access explanations other than causality, one must bring together evidence from different studies and apply well-established criteria that have been refined over more than

a century. Thus, by examining numerous epidemiologic studies, the committee addresses the question, “does the available evidence support a casual relationship or an association between a particular exposure and a specific health outcome?” An association between a specific agent and a specific health outcome does not mean that exposure to the agent invariably results in the health outcome or that all cases of the health outcome are the result of exposure to the agent. Such complete correspondence between exposure and disease is the exception in the study of disease in large populations. The committee evaluated the data and based its conclusions on the strength and coherence of the data in the selected studies. The committee’s final conclusions represent its collective judgment; each committee member presented and discussed conclusions with the entire committee. In some cases committee members strongly believed that the literature supported, for example, a conclusion of “limited/suggested evidence of an association” when other members, on examination of the data, might have concluded that the evidence was ‘inadequate/insufficient of an association.’ In those instances, if a consensus conclusion could not be reached, opposing points of view are presented, and the committee notes that further research is needed to resolve the uncertainty.

Although the committee focused primarily on epidemiologic studies when drawing conclusions, there is a limited role for experimental evidence. Many of the chemicals that are examined in this report have been extensively studied in animals. A complete summary of all the available data on all the solvents and insecticides under review would fill many volumes. Given the small role of experimental studies in this report in the categorization of evidence, such a detailed review would serve no purpose. Instead, the report provides only a broad picture of the most important experimental toxicity data available in reliable secondary sources. For conclusions for “sufficient evidence of a casual relationship”, the relevant experimental data are discussed where such a characterization is supported.

B. Investigational New Drugs

In December 1990 the Food and Drug Administration (FDA) issued a waiver to the DoD allowing the military to administer “investigational new drugs” (INDs) to U.S. troops without obtaining informed consent. The NGWRC understands the intent of the DoD to provide the best possible protection to U.S. troops deployed overseas. However, the NGWRC filed suit to require the DoD to follow other U.S. laws and the Nuremberg Code. Both require informed consent from the patient before an IND is used.

Informed consent means telling the soldiers what they are getting, why they are getting it, maintaining adequate records, and providing any needed medical care resulting from use. On October 17, 1998 PL 105-261 was enacted, requiring the President of the United States to issue a Finding before any INDs are used on military personnel. Thus, PB and BT could not be used without significant executive branch endeavor to meet legal conditions. Unfortunately, this NGWRC, veteran, and service member victory has been virtually nullified by several developments. President Clinton issued Executive Order 13139 in 1999 that allowed him and his successors to waive informed consent in times of national security emergency. Additionally, the FDA instituted an “animal only” rule for

bio-warfare drugs and vaccines that circumvented the long-standing requirement for human efficacy testing on the basis that such testing is unethical. Furthermore, the FDA is now differentially licensing drugs and vaccines for service-members and civilians (smallpox vaccine and PB are now fully licensed for wartime use but civilians are receiving smallpox vaccine under an IND). Upon determination by the President, at the request of the Secretary of Defense, and because of the FDA ruling, service members now face the exact same problem of forced experimentation experienced by Gulf War veterans.

1. Pyridostigmine Bromide

a. Historical Perspective

Pyridostigmine Bromide (PB), a nerve agent pre-treatment drug, was a small white pill issued to U.S. and U.K. troops in blister packets. According to the DoD, as many as 250,000 U.S. troops took PB pills. The DoD failed to follow the FDA waiver, and very few records exist documenting who took how many of these pills.

Approved only for use in cases of a severe neurological disorder known as myasthenia gravis or to reverse anesthesia, PB has never been approved for use on civilians to protect against chemical warfare agents -- this is why it has IND status (NO longer IND since March).

In the few limited tests conducted prior to the war by the DoD, women, smokers, and anyone who might be at all sensitive to the drug were not allowed to participate. Despite screening, *some* adverse effects were noted. *Some* researchers believe pre-treatment with PB is only effective in relation to exposure to soman and they claim it may increase adverse effects of sarin. In 1994, the Senate Veterans' Affairs Committee issued a report on PB pills.

b. Status of Investigations and Epidemiological Research

The National Gulf War Resource Center is demanding answers from the FDA concerning their recent approval (see www.ngwrc.org) of PB as a pretreatment for exposure to the nerve agent Soman. Documents and scientific studies conducted over the last 12 years have clearly shown this drug is *both experimental and* harmful when used for CW pretreatment, since soldiers are exposed to pesticides and other substances that increase PB's toxicity. The Department of Defense and the Department of Veterans Affairs have both concluded through previous studies that PB could not be ruled out as a factor in Gulf War veteran illnesses. In fact, Congress banned DoD's use of the substance in an amendment to the FY '99 Defense Authorization Bill unless it was approved for use by a Presidential waiver. http://www.appc1.va.gov/gulfwar/docs/ID_GWAUG2001Nu.PDF

c. Several problems persist for use of this substance:

1) Studies have shown that PB's effectiveness against Soman is questionable; more important, Our enemies in Iraq and Afghanistan have never been shown to have stores of soman. Prescribing PB as a pretreatment is unscientific, dangerous, and appears to be simply a CYA maneuver in the event other measures, such as personal protective equipment, fail a guess and is not proven effective by scientific fact.

2) PB's dosing for effectiveness is variable in each individual and would require individual evaluation due to the genetics and the size of the person receiving the dose.

3) PB is known to cause muscle damage in the animal studies cited by the FDA with even one dose.

4) Researchers have shown that PB, with simultaneous exposures to combinations of DEET, permethrin, sarin, or jet fuel, causes brain and testicular injury in experimental animals.

Thus, in allowing this use, the FDA, DOD, Congress, and the President are permitting a questionable protection against Soman and increasing the likelihood that troops will be more susceptible to Sarin. It is possible that those who made the decision think they have chosen the lesser of two evils with the troops' protection in mind. But policy a decision TYPO that ignores the facts about the risks of PB is irresponsible policy-making.

It is unfortunate that the FDA has approved PB when it is known to have harmed veterans of the last Gulf War. Once again our government is putting soldiers in another type of "Harms Way," which could have been prevented. FDA's ruling is most likely the impetus for soldiers saving their sperm prior to the latest deployment to the Gulf region. The very least the Pentagon should have done is to give pre- and post-deployment exams and blood draws that may allow for analysis of PB effects on health.

2. Botulinum Toxoid (BT) Vaccine

The Botulinum Toxoid (BT) vaccine is also an IND. Before the 1991 war began, Ralph Nader's Public Citizen sought a court order to prevent the military from using the anti-nerve agent pill and botulism toxoid vaccine. According to the DoD, approximately 8,000 U.S. troops received this vaccine. Again, the DoD failed to comply with the FDA waiver, and few records were kept showing who received the BT vaccine. An amendment by Senator Byrd of West Virginia to the FY 1999 Department of Defense Authorization Bill required the military to stop using this vaccine, along with the PB Tabs, without a waiver of informed consent by the President. The NGWRC is not aware of any research underway or completed regarding the long-term effects of the BT vaccine.

3. Anthrax Vaccine

Historical Perspective – The anthrax vaccine is approved by the FDA only for skin-contact exposure. The vaccine was administered to approximately 150,000 U.S. troops in 1990 and 1991, according to the DoD. Very few records were kept showing who received it, when it was given, or which lot of vaccines were used on U.S. troops. Many records were not kept due to a mistaken belief by some military healthcare providers that the anthrax vaccine was a classified matter, according to the DoD. Some shot recipients did not deploy, but did develop illnesses similar to other veterans who had shots and other toxic exposures in theater. As of 1999, there were no completed or on-going studies regarding the long-term effects of the anthrax vaccine.

In 1998, the DoD began a mandatory anthrax vaccine program for all 2.4 million active duty, reserve, and guard troops. This program remains highly controversial as a result of the failure of the DoD to keep adequate records during the Gulf War as well as the failure of the DoD to consider or to conduct long-term medical research on the adverse effects of the anthrax vaccine. Thousands of soldiers, sailors, airmen, and marines have reported adverse reactions, some severe and life threatening. About 500 active duty, national guard or reservists refused to take the shot, and many more resigned or retired rather than face it. This situation is largely due to the DoD's damaged credibility with regards to Gulf War Illnesses.

There are additional reports, according to the General Accounting Office (GAO), regarding the possibility that the DoD added synthetic squalene to the anthrax vaccine. The DoD denies tampering with the vaccines. The synthetic additive is not FDA approved. This matter remains under investigation.

Short term adverse reactions reported by recipients of the anthrax vaccine include: extreme fatigue; local pain at the injection site with swelling and pain extending into other parts of the body; muscle and body weakness; dizziness; palpitations; nausea and vomiting; fever; blurred vision; general malaise. It is unclear which effects are directly the result of the vaccination.

Long-term side effects being reported by some recipients of the anthrax vaccine include: extreme fatigue; concentration and memory impairment; dizziness; joint and muscle pain; nausea; muscle and body weakness; blurred vision; endocrine disorders; autoimmune illnesses; general malaise.

a. Status of Investigations and Epidemiological Research

On 29 June, 2002, the Assistant Secretary of Defense for Health Affairs, Dr. William Winkenwerder announced the resumption of mandatory anthrax vaccine shots for service members after a year hiatus from dwindling inventory due to a huge quarantine of contaminated lots and a new FDA approval for the manufacturer's facility license. (http://www.defenselink.mil/news/Jun2002/t06292002_t0628ww.html).

Since the shots resumed in earnest in November/December 2002, the NGWRC has received several calls per week (sometimes several in a single day) from troops, their family members, or the media, on the third major military use of anthrax shots (Anthrax Vaccine Adsorbed, or AVA). Since for some Gulf War veterans this issue remains unresolved sentence not completed

The following subtopics report on developments in important areas relevant to anthrax shot concerns of Gulf War veterans, their families, and currently serving service members.

Lawsuits: Several lawsuits have been filed in this matter from opponents and victims –

Groups experiencing severe illnesses after receiving the anthrax shot (in process - <http://www.sskrplaw.com/vaccine/>)

A Qui Tam (whistleblower) lawsuit against the manufacturer for making false claims about the anthrax vaccine that caused personal harm to the plaintiff's job they lost--may appeal (in process - <http://www.majorbates.com/law/dinglevsbioport.pdf>).

Action against the Pentagon, FDA, and Bioport to declare the vaccine experimental for its current use (dismissed, but will resurface in another form - already resurfaced and waiting for a judge to rule on a temporary restraining order.
http://www.ngwrc.org/anthrax/law/03may01_dj_lawsuits.html)

The Military Vaccine Education Center <http://www.milvacs.org/> is a resource directory for active-duty troops, veterans, and others who are concerned about the military's mandatory bioterrorism vaccines. Here you will find an overview of these vaccines, the latest news, support groups, medical and legal resources, and more - including Dept. of Defense links.

b. New Medical Developments in Anthrax Research- Mouse Study Gives New View of Anthrax Toxin

A large-scale study of anthrax in mice has yielded new information about immune system response to anthrax bacteria, according to scientists at the National Institute of Allergy and Infectious Diseases (NIAID), one of the National Institutes of Health. The discovery that toxins released by the bacteria do not behave as previously believed should redirect approaches to anthrax drug design, notes NIAID Senior Investigator Stephen Leppla, Ph.D., whose research is published in today's issue of the *Journal of Clinical Investigation*.

In the new study, Dr. Leppla and his colleagues injected hundreds of inbred mice with anthrax lethal toxin (LT), and then took precisely timed measurements to determine how various organs and immune system processes responded. For example, they measured levels of chemicals called cytokines, which are released by immune system cells after a bacterial invasion. Dr. Leppla and his colleagues found no evidence of a persistent

increase in cytokines, or of a link between cytokine increase and anthrax LT effects, contradicting earlier beliefs.

The evidence suggests that current efforts to design cytokine-suppressing drugs to treat lethal toxin-mediated events in late stages of anthrax may be misguided. "Finding effective therapies for diseases such as inhalational anthrax depends on our ability to connect basic research with clinicians' needs. This research is a perfect example of such translational research," says NIAID Director Anthony S. Fauci, M.D.

"Science has had a good understanding of anthrax toxins at molecular and subcellular levels," says Dr. Leppla. "What has been lacking is a picture of the much more complex effects of toxins on tissues and animal models. Ours is one of the first comprehensive studies to critically examine what is actually happening at these higher levels of complexity."

In a natural infection, inhalational anthrax begins after anthrax bacteria spores enter the body, germinate and release toxins. Scientists can create artificial infection by injecting animals with anthrax LT. The accumulation of toxins precipitates events that lead to death. For more than a decade, scientists based their understanding of LT actions on the results of a few studies that employed a limited number of mice. Because of the high cost of doing anthrax toxin research and the small number of anthrax researchers, theories about LT action went largely unquestioned.

"We still do not know how LT brings about the hypoxia and shock-like death we see in mice," says the paper's first author, Mahtab Moayeri, Ph.D. The next important step, she adds, will be to identify the cell targets of LT and determine precisely how it initiates the chain of events leading to death.

Researchers at the National Cancer Institute also contributed to this research.

NIAID is a component of the National Institutes of Health (NIH), which is an agency of the Department of Health and Human Services.

Reference: M Moayeri *et al.* *Bacillus anthracis* lethal toxin induces TNF- α independent hypoxia-mediated toxicity in mice. *Journal of Clinical Investigation*. 112:670-82 (2003)
DOI: 10.1172/JCI 200317991.

Note: NGWRC is pressing the Secretary Principi to presumptively award service-connected disability to Gulf War veterans exposed to chemical agents. The IOM will publish the results of its re-evaluation of the sarin connection within the next few months.

c. Recent Press Coverage

Probably the most recent and comprehensive article depicting shot problems that developed over the past 4 years is the London Times article of November 26, 2002

(<http://www.timesonline.co.uk/article/0,,7-492718,00.html>). Also, a British Gulf War veteran who received shots but did not deploy was recently awarded a disability pension. (<http://www.sundaymail.co.uk/news/page.cfm?objectid=12486788&method=full&siteid=86024>).

d. Petition to the FDA

On October 12, 2001, several key opponents of the AVIP policy (service members, attorneys and a retired FDA official) filed a petition with the FDA to declare the vaccine unsafe, misbranded, or ineffective, as well as adulterated and experimental given the DoD's use for inhalation exposure.

(http://www.ngwrc.org/anthrax/PDF/FDA_citizen_petition.pdf). Additionally, the petition requested the FDA to enforce its regulations prohibiting distribution of an adulterated product to government or commercial markets and to revoke the manufacturer's license for such violations.

In their October 2002 response to the petition (<http://www.ngwrc.org/anthrax/update.htm>), the FDA admitted the current vaccine's license is improper and that the FDA had not enforced its own regulations. In spite of these glaring admissions, the FDA refused to grant any of the petitioner's requests, thus setting the stage for an appeal or action in federal court, both of which are currently under consideration.

e. VA Developments

On May 14th, 2002, the VA General Counsel issued a legal finding specifically establishing service-connected disability solely for the anthrax vaccine by redefining the meaning of the word "injury" (http://www.va.gov/ogc/docs/PREC_4-2002.doc).

f. Citation

"If evidence establishes that an individual suffers from a disabling condition as a result of administration of an anthrax vaccination during inactive duty training, the individual may be considered disabled by an "injury" incurred during such training as the term is used in 38 U.S.C. § 101 (24), which defines "active military, naval, or air service" to include any period of inactive duty training during which the individual was disabled or died from an injury incurred or aggravated in line of duty.

Consequently, such an individual may be found to have incurred disability in active military, naval, or air service for purposes of disability compensation under 38 U.S.C. § 1110 or 1131."

Also, there are now several cases of Gulf War and post-Gulf War veterans being awarded disability ratings that indicate the VA is following through on its position.

g. Shot Reactions

Approximately 2000 reactions to the anthrax shot have been filed with the FDA's Vaccine Adverse Event Reporting System, or VAERS. A list of about 500 of these reactions (125 pages in pdf format) is available upon request to the National Gulf War Resource Center. These reactions, filed mostly by service members from 1998-2001, make the anthrax vaccine the most reactogenic shot on the market. Additionally, the vaccine's package insert published by the manufacturer (Bioport), no longer claims a systemic reaction rate of .2%, but acknowledges it could be as high as 35% (<http://www.fda.gov/cber/label/biopava0131022LB.pdf>). The insert also lists nearly 60 different types of reactions and 6 deaths associated with the shot.

h. Other FDA Developments

The FDA approved Bioport to produce new lots of AVA in January of 2002. The FDA's permission left unresolved two issues, the presence of squalene in the shot (discussed later) and the skyrocketing reaction rates known by the Army to be temporally associated with the unauthorized filter changes mentioned in the FDA petition. These filter changes were allowing up to 100X more anthrax lethal factor into final vaccine batches. The FDA did, however, halt the military's use of the lots produced prior to the plant renovation (<http://www.ngwrc.org/article.asp?id=155>). This development is a tacit admission that those lots used by Gulf War veterans and service members up to 2002 were significantly riskier than portrayed in early assessments.

i. IOM Study

In April of 2002, the Institute of Medicine completed a problematic 2-year study mandated by Congress to evaluate the shot's safety and efficacy (<http://www.nap.edu/books/0309083095/html/>). Chapters and appendices showing increased propensity for certain post-shot health conditions were downplayed or ignored along with the new FDA label, five studies showing AVA correlation to Gulf War Illnesses, GAO reports, and previous IOM assessments. Since DoD paid for the study, the report's conclusions could perhaps be expected. Also, the IOM report stated that the vaccine, as licensed, offered protection against inhalation anthrax when the FDA's 1985 interim ruling clearly states that insufficient data precludes such a conclusion. Also, the IOM has no legal standing to usurp that FDA ruling.

j. GAO/Congress:

Representatives Burton, Shays, and Gilman (Gilman retired 20 months ago) wrote the DoD this past spring indicating any resumption of anthrax shots should be made voluntary. However, congressional interest in anthrax vaccine problems waned after the DoD suspended shots for over a year because 5 million doses were quarantined, and after the publication of House Report 106-556 in April, 2000 (<http://www.house.gov/reform/ns/reports/anthraxreport.pdf>). Among other analyses, this report also recommended the shots should be made voluntary. To view the critical GAO

analyses behind the report, simply visit <http://www.gao.gov/> and conduct a search on “anthrax vaccine.” Numerous reports appear that addressed manufacturing problems, retention impacts, safety and efficacy, medical readiness, squalene, and contractual and financial anomalies.

k. Women’s/Birth Issues

Early in the AVIP program, the Army injected 600 medical workers at its Tripler Army Medical Center in Hawaii with the anthrax shot. Statistics there showed women getting reactions at twice the rate of men. The Army’s top immunologist declared at a May 1999 Ft Detrick meeting that attendees might regret pushing this vaccine given the women’s immune system differences. This warning became reality as the September 2001 issue of *Self* magazine documented several severe cases of women’s reactions.

Also in 1999, three congresswomen wrote Secretary of Defense Cohen requesting shots be made voluntary for women (<http://www.anthraxvaccine.org/congwom.htm>).

These concerns were further verified when the Wall Street Journal and the Army Times published stories on preliminary Navy studies indicating problems for women. Clicking on "Latest News" at <http://www.majorbates.com> provides the January 21 and January 16, 2002 hyperlinks to those articles. Although the Assistant Secretary of Defense for Health Affairs instructed the services to come up with a plan for screening female service members, it remains unclear just how these evaluations are working.

l. Squalene

Some Gulf War veterans have long suspected the use of this experimental adjuvant in the anthrax shot is the root cause of their ailments. Dr. Pam Asa and colleagues created a test to detect antibodies to squalene and discovered all sick Gulf War veterans had these antibodies compared to none in her control group. Several GAO reports indicated that squalene issues could be resolved given more cooperation from the Pentagon that was not forthcoming. After years of total denial about squalene, the FDA discovered squalene in all eight anthrax lots tested in 1999. This information came out in a House Government Reform Committee hearing on October 3, 2000 in a 3-year report from Representative Metcalf (State of Washington) who was retiring. The Washington Times weekly news magazine “Insight on the News” (<http://www.insightmag.com/>) covered the entire history of the squalene controversy. A search on “squalene” at that website produces 11 articles, the most recent of which contains this poignant statement by an unnamed FDA official:

"Something is wrong when we find a contaminant in the vaccine [lots tested] that shouldn't be there," an FDA official tells Insight. "That tells me an investigation should have been launched. It wasn't, because of pressure, and that's not right; this vaccine should not be used until DoD finds out how squalene got into those tested batches, whether other batches are contaminated and what are the health consequences from the contamination."

In a recent bizarre twist to this issue, deploying British service members dumped thousands of anthrax vaccine vials overboard as they proceeded to the current Iraqi conflict. Some of those vials of new production lots got tested for squalene and came up positive. Given this irrefutable proof of experimentation above and beyond the Asa squalene antibody presence in sick British Gulf War veterans, there can no longer be any doubt that squalene was indeed put into their bodies without their permission. The new U. S. lots should also be tested for squalene, and the FDA indicated in a letter to Representative Metcalf that this could be done. However, neither the Congress nor the DoD have followed up on this offer that would clear up the question of squalene presence.

The NGWRC continues to take every opportunity to shine the light on this vaccine, hoping to attain recognition, diagnosis, and treatment for Gulf War veterans, and better force protection for the future.

C. Depleted Uranium

1. Historical Perspective

Depleted uranium (DU) is a radioactive toxic waste product used as an anti-tank weapon. Fired by tanks and attack airplanes, more than 640,000 pounds (about 300,000,000 grams) of DU were expended on the Gulf War battlefield. The U.S. government states exposure of .01 gram in one week can cause health problems. Each U.S. DU round fired by our M-1 series tanks creates as much as 3,100 grams of fine radioactive toxic dust upon impact. Many research studies show that inhaled DU dust, which is insoluble and may remain in the body for years, may be the most serious form of exposure.

During the Gulf War, several military regulations required that soldiers entering areas known or suspected to be contaminated by radioactive materials have their medical records noted and that soldiers be provided medical tests to determine the level of exposure, if any.

Despite repeated pre-Gulf War warnings, the military failed to follow the law, and there no known records of the length or level of DU exposures. As with other exposures, the lack of reliable data remains the main obstacle to researchers investigating DU poisoning. In March 1998, the NGWRC produced information showing as many as 400,000 U.S. troops may have been exposed to DU. The DoD hotly disputed this assertion.

However, by November 1998, the DoD (through the Office of the Special Assistant for Gulf War Illnesses -- OSAGWI), released a map confirming as many as 436,000 U.S. troops entered into areas heavily contaminated by fine particles of DU radioactive dust. In conjunction with Swords to Plowshares and the Military Toxics Project, the NGWRC has published the results of an extensive investigation into DU contamination. Our report, "Depleted Uranium Exposures Case Narrative," is available at our website, <http://www.ngwrc.org>. Just do a search on DU.

Exposure to DU armor and/or penetrators may be dangerous. DU poses the greatest potential to cause health problems among people who:

- .. Are in a friendly fire incident involving DU rounds;
- .. Breathe smoke or dust from a burning vehicle hit by DU rounds;
- .. Eat food or drink water contaminated by DU dust;
- .. Climb on or enter a vehicle or bunker hit by DU rounds;
- .. Collect, handle, or participate in cleaning up spent DU fragments or penetrators;
- .. Breathe smoke or dust from a fire involving DU armor and/or rounds, such as the July 1991 fire at Doha, Kuwait;
- .. Treat those injured by DU shrapnel (many covered with dust); and
- .. Maintain or repair of vehicles struck by DU rounds

Recently published and/or released information from the Armed Forces Radiobiology Research Institute (part of the DoD), plus findings from a VA follow-up program at the Baltimore, Maryland VA, show evidence that:

- .. In animal studies, DU settles in the bone, brain, lung, muscle, kidney, liver, and testicles;
- .. In animal studies, DU transforms cells into a tumorigenic phenotype;
- .. DU cells form tumors in mice;
- .. In animal studies, DU is mutagenic;
- .. In animal studies, DU is associated with reduced litter size;
- .. From the results of animal studies, strong evidence exists to support a detailed study of potential that DU is associated with cancer;
- .. In follow-up on Gulf War veterans, DU was found in semen; and
- .. In follow up on Gulf War veterans, elevated DU in urine is linked to increased neurological problems.

In 1996, the Presidential Advisory Committee on Gulf War Veterans' Illnesses (PAC), concluded that there may be an increase in the number of cases of lung cancer among Gulf War veterans due to exposure to depleted uranium radioactive toxic waste dust.

The NGWRC repeatedly requested research into DU exposures, and the leaders at the DoD refused.

One refusal came during a face-to-face meeting on April 15, 1999 between Bernard Rostker, the head of OSAGWI, NGWRC President Chris Kornkven, and NGWRC Executive Director, Paul Sullivan. Without citing a single medical research paper, the DoD simply claims that DU "saves lives," is "safe," and there is "no need" for additional medical research.

In April 1999, the deputy director of OSAGWI, retired Army Lieutenant General Dale Vesser, refused to allow NGWRC leaders to meet with OSAGWI staff to discuss and review DU training programs. The NGWRC later discovered that the DoD is unable to verify that DU training has started, even though this training is required by a new law. The NGWRC pressed for enactment of the training law in 1998.

By July 1999, the Pentagon refused to respond to any further requests from the NGWRC regarding DU, citing national security and on-going litigation over the use of radioactive toxic waste as ammunition.

In a related manner, the Presidential Special Oversight Board, chaired by former Senator Warren Rudman, with retired Army Colonel Michael Naylor as Executive Director, refused to consider new research into DU exposures. Naylor refused to consider new research into respiratory problems, adverse reproductive outcomes, or increases in cancer among Gulf War veterans during a face-to-face meeting on August 27, 1999.

The PSOB, created in November 1997, followed up on the incomplete and highly criticized Final Report of the PAC issued in January 1997. The PSOB, on August 27, 1999, issued a brief report claiming there was no link between DU and Gulf War veterans with undiagnosed conditions. However, the PSOB failed to cite a single medical study on Gulf War veterans exposed to DU or Gulf War veterans with undiagnosed illnesses to support their claims. The PSOB followed the same pattern as OSAGWI when OSAGWI made similar baseless assertions in August 1998.

There is some limited research being conducted by the Armed Forces Radiobiology Research Institute (part of the DoD, and cited above), and the NGWRC has copies of their published reports available for free.

In 1993, at the request of Gulf War veterans and the GAO, the VA began a follow-up program among a very small group of 33 Gulf War veterans involved in friendly-fire incidents. By September 1999, more Gulf War veterans continue stepping forward who were injured by DU shrapnel -- many were never informed the shrapnel in their bodies was DU. Many of these veterans were not evaluated for contamination levels until 1999. In addition to the Baltimore program, the VA launched a DU testing program, and veterans who believe they may have been exposed should call the VA at (800) PGW-VETS or the DoD at (800) 472-6719 for further information. If the VA or DoD do not

respond to your call within one week, write a letter to your military commander or your local VA medical center and request the DU test.

Although testing results for the presence of DU in urine may be ineffective after so many years, the NGWRC strongly encourages participation in this testing program. Part of the DU testing involves a lengthy questionnaire, and the results of the questionnaire may force the VA or DoD to presume you were exposed, even if the test results are negative.

Status of Investigations and Epidemiological Research – DU exists in large quantities and its use in munitions relieves governments of their fiscal and legal responsibilities to properly store it. In addition, DU's extreme density (1.7 times that of lead), pyrophoricity (it burns when it fragments), and resistance to deformation (when alloyed with a small amount of titanium) enable it to effectively penetrate tank armor. The US Navy is, however, phasing out its use of small caliber DU rounds (20mm). The chart below shows the post Gulf War figures on DU. Obviously, it continues to be used in the present Iraqi conflict.

DU use in combat since the Gulf War

	Bosnia 1994-1995	Kosovo, Serbia, Montenegro 1999	Afghanistan 2001-Present
Source	US Aircraft	US Aircraft	Uncertain
Quantity	3.2 Metric Tons	9.5 Metric Tons	Uncertain

Recent Laboratory studies on rats indicate short-term effects include kidney damage, while long-term effects may include cancer, central nervous system problems, immune system disorders and reproductive effects.

Few humans exposed to DU have been studied, therefore little is known about the effects DU has had or may have in the future on exposed populations. The US government claims it has not found evidence of significant health effects caused by DU in a study of a few dozen Gulf War veterans, although Pentagon spokesmen have lied about the existence of cancer among these veterans. There have been many claims made about DU causing a large number of serious health effects in Iraq, the Balkans, and Afghanistan, but these claims have not been confirmed by credible, independent sources. The World Health Organization (WHO) visited Iraq shortly in September 2000 to evaluate claims that DU use in the Gulf War had contributed to increased cancer and birth defect rates, however, NGWRC has no information at this time on the results of the WHO investigation.

DU may also contaminate soil, water, and air, as well as plant and animal life. The extent of the contamination and its risk to public health depend on the quantity and size of the DU released, its local concentration, and environmental conditions.

The use of DU munitions by the US and its allies in the war in Afghanistan remains unclear. Claims about the use of DU munitions in Afghanistan have neither been confirmed by the US military, nor verified by independent investigations. Nonetheless, it appears likely that US forces used some DU munitions, and the Taliban and/or al Qaeda may have possessed DU rounds.

Depleted Uranium Fact Sheet: United Nations Environment Program, September 2003.
<http://postconflict.unep.ch/dufact.html>

2. Background

Depleted uranium (DU) is a dense metal used in munitions for its penetrating ability and as a protective material in armored vehicles. It is a toxic and radioactive heavy metal. The United Nations Environment Program (UNEP) has been conducting environmental measurements on targeted DU sites in Kosovo in 2000, Serbia and Montenegro in 2001, and Bosnia and Herzegovina in 2002. In addition, UNEP was involved in the IAEA DU assessment to Kuwait in the spring of 2002. All these studies confirm that DU has environmental impacts. Health risks primarily depend on the awareness of people coming into contact with DU. Radiological and chemical effects of DU are likely to occur only under worst-case scenarios. UNEP DU reports always recommend precautionary action such as, measurements, signing, fencing and clean-up of the targeted sites to avoid possible health risks.

3. What is Depleted Uranium?

Depleted uranium (DU) is a by-product from the process that enriches natural uranium ore for use as fuel in nuclear reactors and nuclear weapons. It is:

- highly dense,
- radioactive,
- a heavy metal with both offensive and defensive military applications.

a. Non-explosive radioactive metallic core bullets

- DU munitions are made of a non-explosive, solid metallic core bullet (called a penetrates).
- Tanks fire larger caliber rounds (105 and 120mm).
- Aircraft fire smaller caliber rounds (20 - 30 mm).
- DU is not confirmed to be used in bombs or missiles.

b. Anti-armor munitions

Depleted uranium is used in anti-armor munitions because of its high density (19.0 g/cm³; 50% higher than lead) and has several properties that make it ideal for this purpose.

- When a DU penetrates hits armor or a hard surface, the rod begins to self-sharpen, thereby enhancing its ability to pierce the object. Casings/jackets do not penetrate.
- DU forms a cloud of finely dispersed particles in air (called “aerosol”) during penetration. This may cause a dust explosion, since DU ignites spontaneously in contact with air (also called “pyrophoric”).

The amount of depleted uranium, which is transformed into dust, will depend upon the type of munitions, the nature of the impact, and the type of target. The number of penetrators hitting a target depends upon many factors, including the type and size of the target. On average, not more than 10% of the penetrators fired by planes equipped with large machine guns hit the target (20 - 30 mm rounds). DU munitions that do not hit hard targets will penetrate into the soft ground or remain more or less intact on the surface. These will corrode over time, as metallic DU is not stable under environmental conditions.

4. What Does It Look Like?

The intact DU munitions have the appearance of a grayish-black, non-metallic surface. Over time, DU reacts with air and moisture and forms a yellowish green surface. Lemon yellow uranium oxide particles are therefore often found around target areas.

a. Types of DU that aircraft use

- has a cylindrical DU penetrates rod with a conical tip (25 and 30 mm ammunition),
- is approximately 95 mm in length and 16 mm in diameter at the base,
- weighs approximately 300 grams,
- has the penetrates fixed in an aluminum 'jacket' (also called 'casing'), with a 30 mm diameter and 60 mm length.

b. Types of DU that Tanks use

- Has an “arrow” consisting of a metallic DU rod about 300 mm in length,
- weighs between 3,9 and 4,9 kg depending on the caliber shot (105 mm /120 mm),
- is used in tank-to-tank battles.

5. When Was It Used?

DU munitions were confirmed to have been used for the first time in the 1991 Gulf War, followed by 1994-95 in Bosnia and Herzegovina, then 1999 in the Kosovo conflict, and finally 2003 in Iraq.

6. Where Can You Find It?

DU penetrators, penetrator fragments and jackets/casings can be found:

- lying on the surface,
- buried within shallow ground around targeted areas,
- in areas where tanks came into combat.

Most of the penetrators that impact on soft ground (e.g. sand or clay) will probably penetrate intact more than 50 cm into the ground and remain there for a long time. Only a small percentage of penetrators will give off DU dust or ricochet when hitting armored vehicles or other hard surfaces (e.g. concrete).

a. Casings/jackets:

- do not usually penetrate,
- can easily be found on the surface
- they are a further indication that DU was used,
- they are not radioactive in themselves, but are slightly contaminated where the DU round came into contact with the jacket.

b. Localized ground contamination (i.e. a couple of grams of DU on the surface):

- occurs through dispersion and deposition (aerosolization) of fine DU particles immediately following an attack,
- occurs through weathering of metallic DU pieces with time,
- the area that is contaminated is most often very limited,
- over time, penetrators, smaller fragments and dust can gradually be dispersed on the soil surface mainly by rain water and thereby at the same time be diluted,
- wind can cause further redistribution, flowing water may also move smaller fragments and DU dust into the ground,
- the inner and outer surface of armored vehicles that were destroyed by DU ammunition will often be heavily contaminated by DU dust.
- Even though DU has a relatively low radioactivity, as a matter of fact lower than that of natural uranium, it is prudent to undertake some precautionary steps prior to entering known targeted areas and vehicles. The following health risks should be taken into account.

7 Health Risks

a. Health effects depend on:

- the route and magnitude of exposure (ingestion, inhalation, skin contact or wounds),
- the characteristics of the DU (such as particle size, chemical form and solubility)

b. DU is a toxic heavy metal

- DU is chemically toxic, as is naturally occurring uranium,
- it is a heavy metal,
- the toxic effect depends on the amount taken into the body,
- the kidney is the most sensitive organ to uranium poisoning,
- the chemical toxicity of uranium leads to strong effects (poisoning) within hours or days after body contamination,
- radiological effects may occur after years.

c. DU is radioactive

DU emits three types of ionizing radiation: alpha, beta and gamma. Exposure to radiation from DU:

- can be external (mainly by close contact of DU to the skin),
- can be internal (by inhalation or ingestion) and
- may result in increased risk of cancer. The magnitude of risk depends on the part of the body exposed (particularly the lungs through inhalation) and on the radiation dose.

The radiological toxicity comes from DU radioactive decay, mainly through emission of alpha particles. These particles do not have the ability to penetrate the skin. However, if ingested or inhaled DU dust may irradiate the lungs or gut (epithelium), thereby causing a radiation dose. The dose is most often very small from inhaled and ingested DU because of low air concentration or low oral intake.

At low levels of exposure, as expected in most post-conflict situations, the additional risk of cancer is thought to be very low. Importantly, any radiation effects based on DU occur only in the long-term, requiring typically 10-20 years before symptoms appear - if ever.

In those penetrators measured by UNEP, minute traces of plutonium exist, but on such low levels that this doesn't increase the overall health risks.

8. Risk of DU Exposure in Targeted Areas

- by touching corroded penetrators and not washing hands afterwards,
- by picking up penetrators or fragments, and keeping them in a pocket for days/weeks
- via inhalation of DU dust, especially in the early stage (hours, days, weeks) after attack had taken place,
- via ingestion of DU debris and impacted soils, contaminated food (fruit, vegetables, meat, etc.) and drinking water.

9. Precautionary Steps

- Do not enter known DU targeted sites prior to site decontamination.
- If entry is necessary, wear personal protective equipment (PPE) including rubber boots, gloves and as a minimum a dust mask.
- Additional caution should be taken as DU is frequently used in combination with cluster bombs during an attack. Not all cluster bombs detonate during an attack and a few may still be present on such sites.
- Attacks may have also taken place in mined areas.
- If DU munitions are found or suspected, do not touch or pick it up.
- Mark the exact location with a flag and/or a circle of paint and leave it on site.
- Contact and inform the relevant authority about the finding.
- Only authorized personnel with PPE are permitted to handle DU.
- Authorized personnel will take the necessary health and safety precautions before removal and proper storage of DU
- Effects of DU can be long-term with the resuspension of particles and groundwater contamination. Therefore, local authorities should monitor the site on a regular basis.

10. Additional Information

Photo Gallery Depleted Uranium Fact Sheet

<http://postconflict.unep.ch/photos/dufact/duawareness.html>

Radiological Conditions in Areas of Kuwait with Residues of Depleted Uranium, IAEA

2003 http://www-pub.iaea.org/MTCD/publications/PDF/Pub1164_web.pdf

Depleted Uranium Awareness Leaflet, UNEP 2003

<http://postconflict.unep.ch/publications/DUflyer.pdf>

Depleted Uranium in Bosnia and Herzegovina Post-Conflict Environmental Assessment,

UNEP 2003 http://postconflict.unep.ch/publications/BiH_DU_report.pdf

Uranium in Serbia and Montenegro Post-Conflict Environmental Assessment in the Federal Republic of Yugoslavia, UNEP 2002

<http://postconflict.unep.ch/publications/duserbiamont.pdf>

Depleted Uranium in Kosovo Post-Conflict Environmental Assessment, UNEP 2001

<http://postconflict.unep.ch/publications/uranium.pdf>

Desk Study: The potential effects on human health and the environment arising from possible use of depleted uranium during the 1999 Kosovo conflict, UNEP 1999

http://postconflict.unep.ch/publications/du_final_report.pdf

World Information Service on Energy-Depleted Uranium
<http://www.antenna.nl/wise/uranium/DU>

The military hazards of depleted uranium
<http://www.isisuk.demon.co.uk/0811/isis/uk/regpapers/no78long.html>

The Christian Science Monitor- Trail of the Bullet (DU)
<http://www.csmonitor.com/atcsmonitor/specials/uranium/index.html>

E. Oil Well Fires

1. Historical Perspective

Almost every Gulf War veteran remembers the huge plumes of smoke from the oil well fires. In many cases, the sun was blocked for days at a time and breathing was difficult for many.

While the first known DoD meeting on the hazards of the Kuwaiti oil well fires was in February, 1991, DoD did not begin actively monitoring oil well fire pollution until May 1991, after almost all of the 696,000 U.S. troops who fought in Desert Storm had already departed Southwest Asia. The DoD continued to monitor the pollution levels until December 1991, more than a month after all the fires were extinguished in November 1991.

After these measurements, the DoD created an unrealistic and highly questionable "average level" of oil well fire contamination measurement for the time period between March and December 1991. Using this faulty "average level," the DoD declared the hazard levels to be within acceptable government limits, without citing a single medical study on Gulf War veterans exposed to oil well fire smoke and particulates between January and June 1991.

However, a closer examination of the actual data, obtained only by using the Freedom of Information Act, shows that measured levels of some hazards from the oil well fires frequently "spiked," dramatically exceeding safe standard levels for hours or even days at a time.

In perhaps the most dramatic example from the available data, particulate matter measured directly in the plumes, which frequently touch ground in troop areas, was measured at 21,000 micrograms per cubic meter. This level is more than 80 times the safe maximum level of 260 micrograms per cubic meter.

While the medical literature is clear regarding known health outcomes of particular toxic hazards from within the oil well fires, the lone existing DoD report on Kuwaiti oil well fire contamination skirts around the hazards, brushing them away to a few sentences of cursory acknowledgement buried deep within the 130 page document. Again, there is no published medical research supporting the DoD's claims.

The DoD has also largely failed to analyze or publicize existing data from multiple sources, including EPA and others, regarding the significant hazards of the exceptionally high levels of particulate matter in the air while the Kuwaiti oil well fires were still burning.

2. Status of Investigations and Epidemiological Research

No medical research is completed or underway regarding the effects of oil well fire pollution, especially particulate matter, among Gulf War veterans who served between February and April 1991, when most of the more than 700 oil well fires raged out of control and the pollution was arguably the heaviest. Because of a lack of DoD effort in accurately measuring oil well fire contamination, and despite DoD's own February 1991 recommendations, we may never know how often troops were exposed to such exceptionally high levels of hazardous contamination. The NGWRC continues to request acknowledgement of existing data and additional research into this area. Anyone with exposure data or other information on this topic is asked to contact the NGWRC.

F. Pesticides and Solvents

1. Historical Perspective

Soldiers and civilians in the Persian Gulf region were exposed to a wide variety of toxic substances in varying degrees, including pesticides, chemical agent resistant coating (CARC), diesel fuel, and others.

There were also combinations of exposures, including the interaction between PB pills given troops and various insecticides, such as DEET. Several studies report that the toxicity of either agent alone is not as great as when they are used in combination. When combined, a synergistic effect takes place and the toxicity of each increases up to 10 times. This means that ingesting the PB pills and using DEET may be far more hazardous than using either one alone.

Other exposures include the spraying of diesel fuel to reduce dust, diesel fumes from stoves inside tents, the spraying and liberal use of pesticides, fumes from repainting vehicles with CARC, red fuming nitric acid, and other toxins.

2. Status of Investigations and Epidemiological Research

A recent report released by the Institute of Medicine (IOM) demonstrates what Gulf War veterans have known for the last 12 years. Lack of real-time monitoring, data collection and a lack of willingness to conduct real studies on Gulf War veterans as a population has prevented the IOM from linking exposures of the first Gulf War to illnesses veterans suffer.

The committee reviewed reams of scientific studies. Some studies reviewed demonstrated that pesticides and solvents can, in fact, be linked to long-term illnesses.

However, because there was no baseline data collected during the first Gulf War, the IOM could not speculate on the dose rate, application or duration of exposure for any of the solvents or pesticides considered in this report. Additionally, the reviewers looked at pesticides and solvents in the civilian application since limited data exist for the military use of such products. Most soldiers who served in the war would have years of occupational exposures under their belts as a result daily activities serving in the U.S. military working in and around these dangerous substances. However, lack of data prevented the IOM from drilling down to the veteran's experience.

We already know that DoD failed in 1991 to collect the data scientist would need to reach conclusions. This IOM finding confirms our knowledge. As the next Gulf War looms closer, the DoD claims to have learned from the mistakes of 1991, but the NGWRC and other veteran service organizations don't see the evidence. To be more specific, the Pentagon is not collecting baseline health data in accordance with the public law. If soldiers get sent to war without this data before, during, and after a war with Iraq, the same exact mistakes will occur that prevented the IOM from reaching a conclusion on pesticides and solvents.

3. Multiple Exposures

The IOM admitted that it had not reviewed the most recent studies claiming illness links to pesticide exposure. One study in particular seemed to disagree with the IOM findings. NGWRC has sent that Vogel study to the IOM for further review. This 2002 study, conducted at the Lawrence Livermore National Laboratory, showed that when mice exposed to a nerve agent were also exposed to even trace amounts of a common pesticide, their brains absorbed more than 25% more of the nerve agent.

The results of a DoD-sponsored Duke University study, published in Volume 66, Number 1/2003 of the Journal of Toxicology and Environmental Health, confirmed such compounding effects of multiple toxins. This study showed combinations of PB tablets, DEET, and permethrin (an insecticide) produced testicular abnormalities in stressed rats. Another DoD-sponsored Southern Illinois University study demonstrated that combinations of low-dose sarin, PB tablets, and exercise caused peroxidative tissue injury in mice.

G. Endemic Theater Diseases

Deployment to the Gulf region also meant possible exposure to local diseases. Leishmaniasis is a parasitic infection borne by sand fleas. The disease has an extremely long dormancy period of seven years or more. It manifests with non-specific symptoms such as chronic fatigue and rashes. It can be difficult to diagnose and treat, and can be fatal if not diagnosed and treated properly. The VA found in one study that leishmaniasis turned up in larger than expected numbers among Gulf War veterans. There is no easy non-invasive diagnostic test, so the number of diagnosed cases may be far lower than the actual incidence.

Many physicians are not aware that the type of leishmaniasis typically borne by veterans of the Gulf region is unusual and needs specialized testing only performed by the Centers for Disease Control (CDC). Other diseases endemic to the area include brucellosis and cholera. To date, we know of 29 cases of leishmaniasis from IOM.

H. Post Traumatic Stress Disorder (PTSD)

Many Gulf war vets have been diagnosed with PTSD or other psychological conditions. Post-traumatic stress disorder is experienced by veterans, disaster survivors, police, firefighters, and others dealing with stressful and/or life threatening situations. PTSD is not a form of weakness, mental instability, or something "in your head."

Research has indicated that a normal person when placed under the level of stress existing in war, may undergo serious psychological changes. Some studies have shown physical alterations in brain activity associated with wartime service.

It is important to seek help to deal with these issues, because they may have an effect on your health, and they may aggravate other medical problems, and lead to other serious problems if not treated promptly and properly.

There are many symptoms related to PTSD. Please consult a professional healthcare provider for a diagnosis. The following list of symptoms is provided to assist veterans in determining if they should seek help. If you are unsure, seek help any way. Many veterans choose to seek help at VA Vet Centers located in the local community rather than at a large VA medical center.

A partial list of symptoms includes: sleep disorders, nightmares, insomnia, depression or deep sadness, anger / rage, alienation / emotional numbing (such as avoiding feelings), isolating yourself from others, guilt / survival guilt, anxiety, intrusive thoughts (such as those about the war), flashbacks, hypervigilance / hyperalertness, exaggerated startle reaction (such as jumpiness reacting to sudden noises or physical contact), difficulty concentrating, memory impairment, low self esteem, problems with authority, employment difficulties, relationship difficulties, and self-medication with drugs and alcohol.

For more information on the **Global Asset Functioning Scale (GAF)** for PTSD Claims see <http://www.hadit.com/gaf.htm>

I. Fibromyalgia Syndrome

1. What is Fibromyalgia Syndrome?

By Kristin Thorson of the Fibromyalgia Network www.fmnetnews.com or can be reached at (800) 853-2929.

a. FMS (fibromyalgia syndrome)

Is a widespread musculoskeletal pain and fatigue disorder for which the cause is still unknown. Fibromyalgia means pain in the muscles, ligaments and tendons--the fibrous tissues in the body. FMS used to be called fibrositis, implying that there was inflammation in the muscles, but research later proved that inflammation did not exist.

Most patients with fibromyalgia say that they ache all over. Their muscles may feel like they have been pulled or overworked. Sometimes the muscles twitch and at other times they burn. More women than men are afflicted with fibromyalgia, but it shows up in people of all ages.

To help your family and friends relate to your condition, have them think back to the last time they had a bad flu. Every muscle in their body shouted out in pain. In addition, they felt devoid of energy as though someone had unplugged their power supply. While the severity of symptoms fluctuate from person to person, FMS may resemble a post-viral state and this is why several experts in the field of FMS and CFS believe that these two syndromes are one and the same.

b. Symptoms and Associated Syndromes

1) Pain

The pain of fibromyalgia has no boundaries. People describe the pain as deep muscular aching, burning, throbbing, shooting and stabbing. Quite often, the pain and stiffness are worse in the morning and you may hurt more in muscle groups that are used repetitively.

2) Fatigue

This symptom can be mild in some patients and yet incapacitating in others. The fatigue has been described as "brain fatigue" in which patients feel totally drained of energy. Many patients depict this situation by saying that they feel as though their arms and legs are tied to concrete blocks, and they have difficulty concentrating.

3) Sleep disorder

Most fibromyalgia patients have an associated sleep disorder called the alpha-EEG anomaly. This condition was uncovered in a sleep lab with the aid of a machine which recorded the brain waves of patients during sleep. Researchers found that fibromyalgia

syndrome patients could fall asleep without much trouble, but their deep level (or stage 4) sleep was constantly interrupted by bursts of awake-like brain activity. Patients appeared to spend the night with one foot in sleep and the other one out of it. In most cases, a physician doesn't have to order expensive sleep lab tests to determine if you have disturbed sleep. If you wake up feeling as though you have just been run over by a Mack truck--what doctors refer to as unrefreshed sleep--it is reasonable for your physician to assume that you have a sleep disorder. It should be noted that most patients diagnosed with chronic fatigue syndrome have the same alpha-EEG sleep pattern and some fibromyalgia-diagnosed patients have been found to have other sleep disorders, such as sleep myoclonus or PLMS (nighttime jerking of the arms and legs), restless leg syndrome and bruxism (teeth grinding). The sleep pattern for clinically depressed patients is distinctly different from that found in FMS or CFS.

4) Irritable Bowel Syndrome

Constipation, diarrhea, frequent abdominal pain, abdominal gas and nausea represent symptoms frequently found in roughly 40% to 70% of fibromyalgia patients.

5) Chronic headaches

Recurrent migraine or tension-type headaches are seen in about 50% of fibromyalgia patients and can pose as a major problem in coping for this patient group.

6) Temporomandibular Joint Dysfunction Syndrome

This syndrome, sometimes referred to as TMJD, causes tremendous face and head pain in one quarter of FMS patients. However, a 1997 report indicates that as many as 90% of fibromyalgia patients may have jaw and facial tenderness that could produce, at least intermittently, symptoms of TMJD. Most of the problems associated with this condition are thought to be related to the muscles and ligaments surrounding the joint and not necessarily the joint itself.

7) Multiple Chemical Sensitivity Syndrome

Sensitivities to odors, noise, bright lights, medications and various foods is common in roughly 50% of FMS or CFS patients.

8) Other common symptoms

Painful menstrual periods (dysmenorrhea), chest pain, morning stiffness, cognitive or memory impairment, numbness and tingling sensations, muscle twitching, irritable bladder, the feeling of swollen extremities, skin sensitivities, dry eyes and mouth, frequent changes in eye prescription, dizziness, and impaired coordination can occur.

9) Aggravating factors

Changes in weather, cold or drafty environments, hormonal fluctuations (premenstrual and menopausal states), stress, depression, anxiety and over-exertion can all contribute to symptom flare-ups.

2. Possible Causes

The cause of fibromyalgia and chronic fatigue syndrome remains elusive, but there are many triggering events thought to precipitate its onset. A few examples would be an infection (viral or bacterial), an automobile accident or the development of another disorder, such as rheumatoid arthritis, lupus, or hypothyroidism. These triggering events probably don't cause FMS, but rather, they may awaken an underlying physiological abnormality that's already present in the form of genetic predisposition.

What could this abnormality be? Theories pertaining to alterations in neurotransmitter regulation (particularly serotonin and norepinephrine, and substance P), immune system function, sleep physiology, and hormonal control are under investigation. Substance P is a pain neurotransmitter that has been found by repeat studies to be elevated threefold in the spinal fluid of fibromyalgia patients. Two hormones that have been shown to be abnormal are cortisol and growth hormone. In addition, modern brain imaging techniques are being used to explore various aspects of brain function--while the structure may be intact, there is likely a dysregulation in the way the brain operates. The body's response to exercise, stress and simple alterations in position (vertical versus horizontal) are also being evaluated to determine if the autonomic nervous system is not working properly. Your body uses many neurotransmitters, such as norepinephrine and epinephrine, to regulate your heart, lungs and other vital organs that you don't have to consciously think about. Ironically, many of the drugs prescribed for FMS/CFS may have a favorable impact on these transmitters as well.

3. Common Treatments

Traditional treatments are geared toward improving the quality of sleep, as well as reducing pain. Because deep level (stage 4) sleep is so crucial for many body functions, such as tissue repair, antibody production, and perhaps even the regulation of various neurotransmitters, hormones and immune system chemicals, the sleep disorders that frequently occur in fibromyalgia and chronic fatigue patients are thought to be a major contributing factor to the symptoms of this condition. Medicines that boost your body's level of serotonin and norepinephrine--neurotransmitters that modulate sleep, pain and immune system function--are commonly prescribed. Examples of drugs in this category would include Elavil, Flexeril, Sinequan, Paxil, Serzone, Xanax and Klonopin. A low dose of one of these medications may be of help. In addition, nonsteroidal, anti-inflammatory drugs (NSAIDs) like ibuprofen may also be beneficial. Most patients will probably need to use other treatment methods as well, such as trigger point injections with lidocaine, physical therapy, acupuncture, acupressure, relaxation techniques, osteopathic manipulation, chiropractic care, therapeutic massage, or a gentle exercise

program.

4. What is the Prognosis?

Long term follow-up studies on fibromyalgia syndrome have shown that it is chronic, but the symptoms may wax and wane. The impact that FMS can have on daily-living activities, including the ability to work a full-time job, differs among patients. Overall, studies have shown that fibromyalgia can be equally as disabling as rheumatoid arthritis. On the other hand, follow-up of people meeting the chronic fatigue syndrome criteria indicates that as many as 40% may significantly improve but few are thought to completely recover from this syndrome. Longer term follow-up studies are not available to indicate whether these "improved" CFS patients later relapse with an increase in symptoms. A preliminary follow-up study by the CDC (Centers for Disease Control) reveals that for those individuals with chronic fatigue syndrome who do not recover or significantly improve after five years duration, their most prominent symptom changes from fatigue to muscle pain with concentration problems (sounds a lot like the permanent syndrome of fibromyalgia but the CDC is not checking patients for tender points).

According to a research study by Dedra Buchwald, M.D., people who meet the criteria for both FMS and CFS tend to be at the more severe end of the spectrum of symptoms and are more likely to become work-disabled. Buchwald says her findings underscore the importance of recognizing concurrent fibromyalgia and chronic fatigue syndrome (Rheumatic Disease Clinics of North America 22(2):219-243, 1996).

5. Self-Help Strategies

Lifestyle modifications may help you conserve your energy and minimize your pain. Learn what factors aggravate your symptoms and avoid them if possible. Join your local support group and become informed about your condition by subscribing to Fibromyalgia Network newsletter. In the newsletter, you will read about research findings, new treatment options, and tips on coping with fibromyalgia and chronic fatigue syndrome. In addition, Fibromyalgia Network maintains a list of support group contacts and health care referrals, which is free with your subscription. To subscribe click on the pink "Newsletters/Resources" side button above, or call our toll-free number, (800) 853-2929. Other educational materials may be ordered from Fibromyalgia Network as well.

6. ALS

Amyotrophic lateral sclerosis (ALS), sometimes called Lou Gehrig's disease, is a chronic and rapidly progressive neurodegenerative disease that attacks the brain cells that control muscle movement. As these cells die, the affected muscles weaken and then shrink, leading to progressive paralysis. There are no known cures for this disease. ALS is a non-contagious, adult-onset disease and is rare among individuals under 45 years of age. The disease belongs to a group of disorders known as *motor neuron diseases*, which are

characterized by the gradual degeneration and death of motor neurons.

http://www.ninds.nih.gov/health_and_medical/pubs/als.htm

ALS causes weakness with a wide range of disabilities. Eventually, all muscles under voluntary control are affected, and patients lose their strength and the ability to move their arms, legs, and body. When muscles in the diaphragm and chest wall fail, patients lose the ability to breathe without ventilatory support. Most people with ALS die from respiratory failure, usually within 3 to 5 years from the onset of symptoms. However, about 10 percent of ALS patients survive for 10 or more years.

Because ALS affects only motor neurons, the disease does not impair a person's mind, personality, intelligence, or memory. Nor does it affect a person's ability to see, smell, taste, hear, or recognize touch. Patients usually maintain control of eye muscles and bladder and bowel functions.

The onset of ALS may be so subtle that the symptoms are frequently overlooked. The earliest symptoms may include twitching, cramping, or stiffness of muscles; muscle weakness affecting an arm or a leg; slurred and nasal speech; or difficulty chewing or swallowing. These general complaints then develop into more obvious weakness or atrophy that may cause a physician to suspect ALS.

The parts of the body affected by early symptoms of ALS depend on which muscles in the body are damaged first. In some cases, symptoms initially affect one of the legs, and patients experience awkwardness when walking or running or they notice that they are tripping or stumbling more often. Some patients first see the effects of the disease on a hand or arm as they experience difficulty with simple tasks requiring manual dexterity such as buttoning a shirt, writing, or turning a key in a lock. Other patients notice speech problems.

To be diagnosed with ALS, patients must have signs and symptoms of both upper and lower motor neuron damage that cannot be attributed to other causes.

Although the sequence of emerging symptoms and the rate of disease progression vary from person to person, eventually patients will not be able to stand or walk, get in or out of bed on their own, or use their hands and arms. Difficulty swallowing and chewing impair the patient's ability to eat normally and increase the risk of choking. Maintaining weight will then become a problem. Because the disease usually does not affect cognitive abilities, patients are aware of their progressive loss of function and may become anxious and depressed. Health care professionals need to explain the course of the disease and describe available treatment options so that patients can make informed decisions in advance. In later stages of the disease, patients have difficulty breathing as the muscles of the respiratory system weaken. Patients eventually lose the ability to breathe on their own and must depend on ventilatory support for survival. Patients also face an increased risk of pneumonia during later stages of ALS.

No one test can provide a definitive diagnosis of ALS, although the presence of upper and lower motor neuron signs in a single limb is strongly suggestive. Instead, the diagnosis of ALS is primarily based on the symptoms and signs the physician observes in the patient and a series of tests to rule out other diseases. Physicians obtain the patient's full medical history and usually conduct a neurologic examination at regular intervals to assess whether symptoms such as muscle weakness, atrophy of muscles, hyperreflexia, and spasticity are getting progressively worse.

Because symptoms of ALS can be similar to those of a wide variety of other, more treatable diseases or disorders, appropriate tests must be conducted to exclude the possibility of other conditions. One of these tests is *electromyography* (EMG), a special recording technique that detects electrical activity in muscles. Certain EMG findings can support the diagnosis of ALS. Another common test measures *nerve conduction velocity* (NCV). Specific abnormalities in the NCV results may suggest, for example, that the patient has a form of peripheral neuropathy (damage to peripheral nerves) or myopathy (muscle disease) rather than ALS. The physician may order *magnetic resonance imaging* (MRI), a noninvasive procedure that uses a magnetic field and radio waves to take detailed images of the brain and spinal cord. Although these MRI scans are often normal in patients with ALS, they can reveal evidence of other problems that may be causing the symptoms, such as a spinal cord tumor, a herniated disk in the neck, syringomyelia, or cervical spondylosis.

Based on the patient's symptoms and findings from the examination and from these tests, the physician may order tests on blood and urine samples to eliminate the possibility of other diseases as well as routine laboratory tests. In some cases, for example, if a physician suspects that the patient may have a myopathy rather than ALS, a muscle biopsy may be performed.

The cause of ALS is not known, and scientists do not yet know why ALS strikes some people and not others. An important step toward answering that question came in 1993 when scientists supported by the National Institute of Neurological Disorders and Stroke (NINDS) discovered that mutations in the gene that produces the SOD1 enzyme were associated with some cases of familial ALS. This enzyme is a powerful antioxidant that protects the body from damage caused by free radicals. Free radicals are highly unstable molecules produced by cells during normal metabolism. If not neutralized, free radicals can accumulate and cause random damage to the DNA and proteins within cells. Although it is not yet clear how the SOD1 gene mutation leads to motor neuron degeneration, researchers have theorized that an accumulation of free radicals may result from the faulty functioning of this gene. In support of this, animal studies have shown that motor neuron degeneration and deficits in motor function accompany the presence of the SOD1 mutation.

Studies also have focused on the role of glutamate in motor neuron degeneration. Glutamate is one of the chemical messengers or neurotransmitters in the brain. Scientists have found that, compared to healthy people, ALS patients have higher levels of glutamate in the serum and spinal fluid. Laboratory studies have demonstrated that

neurons begin to die off when they are exposed over long periods to excessive amounts of glutamate. Now, scientists are trying to understand what mechanisms lead to a buildup of unneeded glutamate in the spinal fluid and how this imbalance could contribute to the development of ALS.

Autoimmune responses—which occur when the body's immune system attacks normal cells—have been suggested as one possible cause for motor neuron degeneration in ALS. Some scientists theorize that antibodies may directly or indirectly impair the function of motor neurons, interfering with the transmission of signals between the brain and muscles.

In searching for the cause of ALS, researchers have also studied environmental factors such as exposure to toxic or infectious agents. Other research has examined the possible role of dietary deficiency or trauma. However, as of yet, there is insufficient evidence to implicate these factors as causes of ALS.

Future research may show that many factors, including a genetic predisposition, are involved in the development of ALS.

a. How is ALS Treated?

No cure has yet been found for ALS. However, the Food and Drug Administration (FDA) has approved the first drug treatment for the disease—riluzole (Rilutek). Riluzole is believed to reduce damage to motor neurons by decreasing the release of glutamate. Clinical trials with ALS patients showed that riluzole prolongs survival by several months, mainly in those with difficulty swallowing. The drug also extends the time before a patient needs ventilation support. Riluzole does not reverse the damage already done to motor neurons, and patients taking the drug must be monitored for liver damage and other possible side effects. However, this first disease-specific therapy offers hope that the progression of ALS may one day be slowed by new medications or combinations of drugs. Other treatments for ALS are designed to relieve symptoms and improve the quality of life for patients.

Physicians can prescribe medications to help reduce fatigue, ease muscle cramps, control spasticity, and reduce excess saliva and phlegm. Drugs also are available to help patients with pain, depression, sleep disturbances, and constipation. Physical therapy and special equipment can enhance patients' independence and safety throughout the course of ALS. Gentle, low-impact aerobic exercise such as walking, swimming, and stationary bicycling can strengthen unaffected muscles, improve cardiovascular health, and help patients fight fatigue and depression. Range of motion and stretching exercises can help prevent painful spasticity and shortening (contracture) of muscles. Physical therapists can recommend exercises that provide these benefits without overworking muscles. Occupational therapists can suggest devices such as ramps, braces, walkers, and wheelchairs that help patients conserve energy and remain mobile.

ALS patients who have difficulty speaking may benefit from working with a speech therapist. These health professionals can teach patients adaptive strategies such as techniques to help them speak louder and more clearly. As ALS progresses, speech therapists can help patients develop ways for responding to yes-or-no questions with their eyes or by other nonverbal means and can recommend aids such as speech synthesizers and computer-based communication systems. These methods and devices help patients communicate when they can no longer speak or produce vocal sounds.

Patients and caregivers can learn from speech therapists and nutritionists how to plan and prepare numerous small meals throughout the day that provide enough calories, fiber, and fluid and how to avoid foods that are difficult to swallow. Patients may begin using suction devices to remove excess fluids or saliva and prevent choking. When patients can no longer get enough nourishment from eating, doctors may advise inserting a feeding tube into the stomach. The use of a feeding tube also reduces the risk of choking and pneumonia that can result from inhaling liquids into the lungs. The tube is not painful and does not prevent patients from eating food orally if they wish.

When the muscles that assist in breathing weaken, use of nocturnal ventilatory assistance (*intermittent positive pressure ventilation* [IPPV] or *bilevel positive airway pressure* [BIPAP]) may be used to aid breathing during sleep. Such devices artificially inflate the patient's lungs from various external sources that are applied directly to the face or body. When muscles are no longer able to maintain oxygen and carbon dioxide levels, these devices may be used full-time.

Patients may eventually consider forms of mechanical ventilation (respirators) in which a machine inflates and deflates the lungs. To be effective, this may require a tube that passes from the nose or mouth to the windpipe (trachea) and for long-term use, an operation such as a tracheostomy, in which a plastic breathing tube is inserted directly in the patient's windpipe through an opening in the neck. Patients and their families should consider several factors when deciding whether and when to use one of these options. Ventilation devices differ in their effect on the patient's quality of life and in cost. Although ventilation support can ease problems with breathing and prolong survival, it does not affect the progression of ALS. Patients need to be fully informed about these considerations and the long-term effects of life without movement before they make decisions about ventilation support.

Social workers and home care and hospice nurses help patients, families, and caregivers with the medical, emotional, and financial challenges of coping with ALS, particularly during the final stages of the disease. Social workers provide support such as assistance in obtaining financial aid, arranging durable power of attorney, preparing a living will, and finding support groups for patients and caregivers. Home care nurses are available not only to provide medical care but also to teach caregivers about tasks such as maintaining respirators, giving tube feedings, and moving patients to avoid painful skin problems and contractures. Home hospice nurses work in consultation with physicians to ensure proper medication, pain control, and other care affecting the quality of life of

patients who wish to remain at home. The home hospice team can also counsel patients and caregivers about end-of-life issues.

b. Current Research

The National Institute of Neurological Disorders and Stroke, part of the National Institutes of Health, is the Federal Government's leading supporter of biomedical research on ALS. The goals of this research are to find the cause or causes of ALS, understand the mechanisms involved in the progression of the disease, and develop effective treatment.

Scientists are seeking to understand the mechanisms that trigger selective motor neurons to degenerate in ALS and to find effective approaches to halt the processes leading to cell death. This work includes studies in animals to identify the means by which SOD1 mutations lead to the destruction of neurons. The excessive accumulation of free radicals, which has been implicated in a number of neurodegenerative diseases including ALS, is also being closely studied. In addition, researchers are examining how the loss of *neurotrophic factors* may be involved in ALS. Neurotrophic factors are chemicals found in the brain and spinal cord that play a vital role in the development, specification, maintenance, and protection of neurons. Studying how these factors may be lost and how such a loss may contribute to motor neuron degeneration may lead to a greater understanding of ALS and the development of neuroprotective strategies. By exploring these and other possible factors, researchers hope to find the cause or causes of motor neuron degeneration in ALS and develop therapies to slow the progression of the disease.

Researchers are also conducting investigations to increase their understanding of the role of programmed cell death or *apoptosis* in ALS. In normal physiological processes, apoptosis acts as a means to rid the body of cells that are no longer needed by prompting the cells to commit "cell suicide." The critical balance between necessary cell death and the maintenance of essential cells is thought to be controlled by trophic factors. In addition to ALS, apoptosis is pervasive in other chronic neurodegenerative conditions such as Parkinson's disease and Alzheimer's disease and is thought to be a major cause of the secondary brain damage seen after stroke and trauma. Discovering what triggers apoptosis may eventually lead to therapeutic interventions for ALS and other neurological diseases.

Scientists have not yet identified a reliable biological marker for ALS—a biochemical abnormality shared by all patients with the disease. Once such a biomarker is discovered and tests are developed to detect the marker in patients, allowing early detection and diagnosis of ALS, physicians will have a valuable tool to help them follow the effects of new therapies and monitor disease progression.

NINDS-supported researchers are studying families with ALS who lack the SOD1 mutation to locate additional genes that cause the disease. Identification of additional ALS genes will allow genetic testing useful for diagnostic confirmation of ALS and prenatal screening for the disease. This work with familial ALS could lead to a greater understanding of sporadic ALS as well. Because familial ALS is virtually

indistinguishable from sporadic ALS clinically, some researchers believe that familial ALS genes may also be involved in the manifestations of the more common sporadic form of ALS. Scientists also hope to identify genetic risk factors that predispose people to sporadic ALS.

Potential therapies for ALS are being investigated in animal models. Some of this work involves experimental treatments with normal SOD1 and other antioxidants. In addition, neurotrophic factors are being studied for their potential to protect motor neurons from pathological degeneration. Investigators are optimistic that these and other basic research studies will eventually lead to treatments for ALS.

Exposure to environmental toxins is believed by many to be a contributing factor to the onset of ALS. Numerous studies of environmental and occupational exposure have shown a relationship to ALS. The problem is many of these studies have shown conflicting results and have not been reproducible in subsequent studies. Below is a list of environmental factors which have shown a relationship to ALS. *Note: just because there is a relationship to ALS, it does not mean these factors caused ALS.*

- exposure to agricultural chemical
- environmental lead and manganese
- brain, spinal cord, and peripheral trauma
- the use of pneumatic tools
- dietary deficiencies or excess
- exposure to animals or their hides
- selenium in drinking water
- damage to DNA
- exposure to electric shocks

The incidence of ALS has also been found to be higher among airline pilots and electric utility workers.

The several theories may work together to explain neuron death in ALS:

A variety of cellular insults may intersect, leading individually or in concert to neuron degeneration, neuron death and finally ALS. A faulty gene (1) and excess glutamate (2) may lead to damaging free radicals (3), which can harm the nerve cell's DNA. Glutamate also may lead to the production of detrimental calcium, which can churn out its own supply of DNA-harming free radicals. The free radicals also may injure neurofilaments (4), proteins that serve as the skeleton of the cell. In addition, the immune system (5) may be involved in harming neurons. Abnormalities can lead to an accumulation of the toxic calcium.

The above information is in part from the MDA ALS Newsletter and Dominic Marchese, RPh. http://www.lougehrigsdisease.net/als_causes_of_als.htm

c. Where Can I Find More Information?

The following organizations support research and in some cases can provide information and support for patients and their families.

ALS Association (ALSA)

27001 Agoura Road
Suite 150
Calabasas Hills, CA 91301-5104
info@alsa-national.org
<http://www.alsa.org>
Tel: 818-880-9007 800-782-4747
Fax: 818-880-9006

Les Turner ALS Foundation

8142 North Lawndale Avenue
Skokie, IL 60076
info@lesturnerals.org
<http://www.lesturnerals.org>
Tel: 888-ALS-1107 847-679-3311
Fax: 847-679-9109

Muscular Dystrophy Association

3300 East Sunrise Drive
Tucson, AZ 85718-3208
mda@mdausa.org
<http://www.mdausa.org/>
Tel: 520-529-2000 800-572-1717
Fax: 520-529-5300

Project ALS

511 Avenue of the Americas
Suite #341
New York, NY 10011
projectals@aol.com
<http://www.projectals.org>
Tel: 212-969-0329 800-603-0270
Fax: 212-337-9915

For information on other neurological disorders or research programs funded by the National Institute of Neurological Disorders and Stroke, contact the Institute's Brain Resources and Information Network (BRAIN) at:

BRAIN
P.O. Box 5801
Bethesda, Maryland 20824

(800) 352-9424
www.ninds.nih.gov

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Chapter 4 WHERE AND HOW TO GET HELP

I. Where and How to Get Help-Medical Treatment

The NGWRC is not a medical research organization and cannot make specific recommendations regarding treatments. However, medical researchers and practitioners have had some success in treatment of those ill with Gulf War related illnesses. Specifically, several practitioners are reporting success with ongoing therapy with the antibiotics. Additionally, some individuals have reported success with various alternative medicines and therapies.

Both DoD and the VA recently concluded two research trials:

The first study was based on a controversial theory that a microbial infection (mycoplasma) may be at the root of Gulf War veterans symptoms, is an 18-month study involving a trial of doxycycline or a placebo. Patients were considered to have GWI if they have at least two of three symptoms (fatigue, musculoskeletal pain, neurocognitive dysfunction) that began after August 1990 and that have lasted more than six months and up to the present. Patients who tested positive for *Mycoplasma fermentors*, *Mycoplasma genitalium*, and/or *Mycoplasma pneumoniae* at baseline were eligible to enroll. Patients assigned doxycycline received 200 mg/day. All patients were provided with a potent sunblock preparation for protection from common drug-related photosensitivity.

Findings from the VA antibiotic treatment trial appeared to confirm a high (40%) rate of mycoplasma positivity among ill Gulf War veterans. The study, oddly, defined the primary outcome to be improvement of over a threshold amount on a specific metric, after completion of the treatment period, rather than just assessing whether a significant difference was present. There was strongly significant benefit at the 3-month treatment point in the antibiotic treatment group; however benefit lost significance on further follow-up. Additionally, despite a 40% mycoplasma positivity rate in Gulf War veterans at outset, in both antibiotic treatment and placebo groups the overwhelming majority tested mycoplasma negative at study conclusion, a finding that is difficult to understand. (Even under the conservative assumptions that these Gulf War veterans who tested positive at outset were no more likely than others to become infected, and supposing that mycoplasma recovery and re-infection occur randomly in Gulf War veterans so that only 40% are infected at a given time (but not the same 40%), it would still be expected that 40% of those who received placebo would test positive at study conclusion. This was not the case.) <http://www.gulflink.osd.mil/medsearch/Treatment/VA55.shtml> and <http://www.appc1.va.gov/rac-gwvi/docs/Minutesfinal.doc>

The second study primarily funded by DoD, involved exercise and behavior modification using adaptive behavioral techniques. Cognitive behavioral therapy and exercising seem to provide some relief from the symptoms of Gulf War veterans' illnesses. The results of a new study, the first large-scale, multi-centre trial to compare cognitive behavioral therapy (CBT) and exercise in these veterans, appear in the March 19 issue of the Journal of the American Medical Association. There has also been some controversy among

veterans over the use of psychosocial treatments such as cognitive behavior therapy in treating GWVI. The scientific evidence suggests that stress and psychiatric illness cannot account for GWVI. Still, cognitive behavioral therapy has been shown to help with other chronic, multi-symptom illnesses such as fibromyalgia and chronic fatigue syndrome. And because there appears to be similarities between GWVI and chronic fatigue syndrome and fibromyalgia, Dr. Ncloa Wray decided to approve a study on the subject.

In the study, 1992 Gulf War veterans who reported having at least two of three symptoms (fatigue, pain and cognitive symptoms) for more than six months were randomly assigned to one of four groups: usual care; usual care plus cognitive behavioral therapy; usual care plus individual aerobic exercise training; and usual care plus cognitive behavioral therapy and aerobic exercise. The study has given the Department of Veterans Affairs enough justification to start implementing similar programs at VA centers around the country. Some 200 physicians in the VA system specialize in Gulf War Veterans' illnesses. Psychologists and psychiatrists who are trained in CBT are already employed by the system. The VA is hopeful the program being adopted will have more success and will treat a broader spectrum of individuals - the study participants tended to be very ill; many more veterans suffer from milder symptoms. Others feel that the benefits will be limited. Cognitive behavioral therapy and aerobic exercise provide only modest relief from symptoms of Gulf War veterans' illnesses. Unfortunately, over 80% of the patients showed no improvement of symptoms after 1 year of either or both treatments.

<http://www.healthfinder.gov/news/newsstory.asp?docID=512288>

Active duty military personnel with questions or concerns about their service in the Persian Gulf region - contact your commanding officer or call the Department of Defense (DoD) Gulf War Veterans' Hotline (1-800-796-9699) for an examination.

Gulf War veterans with concerns about their health - contact the nearest VA medical center. The telephone number can be found in the local telephone directory under Department of Veterans Affairs in the "U.S. Government" listings. A Gulf War Registry examination will be offered. Treatment will be provided to eligible veterans. The VA Gulf War Information Helpline can also provide the latest information and assistance. The toll-free telephone number is 1-800-PGW-VETS (1-800-749-8387).

Gulf War veterans in need of **marital/family counseling** - contact the nearest VA medical center or VA vet center. For additional information, call the Gulf War Information Helpline at 1-800-PGW-VETS (1-800-749-8387).

Gulf War veterans seeking **disability compensation** for illnesses incurred in or aggravated by military service - contact a Veterans Benefits Counselor at the nearest VA regional office or health care facility at 1-800-827-1000, or call the VA Gulf War Information Helpline at 1-800-PGW-VETS (1-800-749-8387).

Gulf War veterans seeking participation for their **spouses or children** in the VA-funded health examination program for spouses and children - call the VA Gulf War Information Helpline at 1-800-PGW-VETS (1-800-749-8387). Veterans interested in the alternative self-funded examination for spouses or children - contact the Gulf War Registry Coordinator at the nearest VA medical center for forms and information.

Gulf War veterans interested in learning about the wide range of **benefit programs** administered by VA - contact a Veterans Benefits Counselor at the nearest VA regional office or health care facility at 1-800-827-1000, or call the VA Gulf War Information Helpline at 1-800-PGW-VETS (1-800-749-8387).

Anyone with first-hand information about "**incidents**" that occurred in the Southwest Asia theater of operations during the Gulf War that may be related to health problems experienced by military personnel who served in the War - call the DoD "Incidents" Hotline at 1-800-472-6719.

Veterans who have been diagnosed with a motor neuron disease (including **amyotrophic lateral sclerosis** or **Lou Gehrig's disease**) and who were on active duty between August 2, 1990, and July 31, 1991, regardless of whether they actually served in the Gulf War theater of operations (or family/friends of veterans who are deceased or otherwise unable to contact VA) - call 1-877-DIAL-ALS (1-877-342-5257) to participate in a national survey.

For additional information about VA's program initiatives, see VA's Gulf War **veterans' illnesses** home page at <http://www.va.gov/gulf.htm>.

Gulf War veterans who **encounter difficulties** at a VA medical facility can contact the "**patient advocate**" at that facility for assistance in resolving the problem. The medical or the NGWRC at phone number (301) 585-4000 ex. 162/119.

Representatives of **veterans service organizations**, including the American Legion (1-800-433-3318), Veterans of Foreign Wars of the United States (1-800-VFW-1899), Disabled American Veterans (1-877-426-2838), etc., may also be very helpful to Gulf War veterans, especially veterans who are seeking disability compensation.

<http://www.appc1.va.gov/health/environ/help.htm>

DoD has a hotline for military and their eligible family members to register for medical examinations and treatment that are reporting they have GW related diseases. Anyone can attend to include Active Duty, Veterans and their dependents. They can be reached at 1-800-796-9699. This is located at Walter Reed Medical Center in Washington DC.

The VA has the War Related Illness & Injury Study Centers [War-Related Illnesses and Injury Study Centers \(WRIISCs\)](#)s. They can be contacted at 1-800-749-8387.

There are three subsections. Press one for GW illnesses. The centers are located at the Washington DC VA Hospital (in room 3B203) <http://www.va.gov/WRIISC-DC/> and East Orange VA Medical Center (outside of Newark, NJ) <http://www.wri.med.va.gov/>.

You can call 1-800-722-8340 to the Washington DC location and 1-800-248-8005 for the East Orange Location for additional information. You will need a doctor's referral. The doctor needs to call Helen Malaskiewicz at 1-202-273-8463 for the necessary information/forms.

http://www.va.gov/enviroagents/docs/IL_WRIISC_Referral_Eligibility.pdf

The Department of Veterans Affairs has some new programs for Veterans Returning from Operation Iraqi Freedom. VA has produced a tri-fold that has important information for returning veterans. See - <http://www.va.gov/enviroagents/docs/SVABENEFITS.pdf>

More Data on Combat Related Special Compensation program.
<http://www.dod.mil/prhome/crsc.html>

The form for applying is located at <http://www.dod.mil/prhome/docs/form.pdf>

The VA also has information on the Special Health Care Eligibility for Combat Veterans
http://www.va.gov/enviroagents/docs/Combat_Vets_2-year_health_care_.pdf
<http://www.va.gov/enviroagents/docs/SpecialHCforCombatVets2.pdf>

Other web sites to find information from the VA are:

To apply for VA Health Benefits: <http://www.1010ex.med.va.gov/sec/vha/1010ez> or call 877-222-8387

To apply for compensation, Pension or Vocational Rehabilitation benefits:
<http://vabenefits.vba.va.gov>

To find a facility: <http://www.va.gov/sta/guide/home.asp>

For the 2003 Federal Benefits for Veterans and Dependents Guide:
<http://www.va.gov/pubaff/fedben/Fedben.pdf>

The Center for Women Veterans: <http://www.va.gov/womenvet/>

To find a veterans service organization: <http://www.va.gov/vso/default.asp>

To find a State Veterans Affairs Office: <http://www.va.gov/partners/stateoffice/index.htm>

To get information on reemployment rights and unemployment insurance:
<http://www.dol.gov>

For Burial and memorial Benefits: <http://www.cem.va.gov/burial.htm> or call 800-697-6947

For Educational Benefits www.gibill.va.gov or call 888-442-4551

If you need to talk to someone about Direct Deposit call 877-838-2778. If you have a question about life insurance: for SGLI contact 800-419-1473 or VA Life Insurance 800-669-8477

For those individuals that are hearing impaired, the TDD number is 800-829-4833.

II. Filing A Claim with the VA-What To Do

If you do the following you will have a better than average chance of winning your claim.

A. General Filing Information

1. Gather All Military, Private and VA Medical Records

Gather all the military, private and VA medical records (get copies made). Make a Privacy Act Request at your VA Regional Office. They will have a copy of your Military Medical Record. Request Copies of Military Personnel Records http://www.archives.gov/research_room/vetrecs/ to include all restricted records, counseling statements and evaluation reports. Do not expect the VA to automatically have your medical records from your active duty. Those records will need to be requested either from your unit of assignment or the staging facility in St Louis, MO by completing an SF180. Call or visit your Service Officer from DAV, VFW, or American Legion for this form. Mail the SF 180 to the appropriate address listed on the back of the Form. [http://contacts.gsa.gov/webforms.nsf/0/6A748D94A429DE1085256CB10043FB7B/\\$file/sf180_f.pdf](http://contacts.gsa.gov/webforms.nsf/0/6A748D94A429DE1085256CB10043FB7B/$file/sf180_f.pdf)

Written letters may be mailed to: The National Personnel Records Center (Military Personnel Records) 9700 Page Avenue St. Louis, MO 63132-5100. Response time varies dependent upon the complexity of your request, the availability of records, and workload. Please do not send a follow-up request before 90 days have elapsed as it may cause further delays. http://www.archives.gov/research_room/vetrecs/index.html

2. Obtaining medical records that are already within the VA system

Obtaining medical records that are already within the VA system can be achieved by faxing or mailing a written request providing a "release of information" to the VA Records Section. State the dates of records you're looking for, doctors' reports, lab and

X-ray reports; your name, address, phone number, social security number, and signature. Label your request as a Privacy Act Request.

3. Go to your civilian doctor

Go to your civilian doctor, have him/her perform a C&P exam. Download a copy of the exam from the VA web site <http://www.vba.va.gov/bln/21/Benefits/exams/index.htm>. Have your doctor perform all the test you should have. The VA rarely does the necessary tests. You need to have this done because the VA will not do a complete C&P examination. See #4 for further explanation

4. Get statements from all private doctors or other medical provider

Get statements from all private doctors or other medical provider, have them state that your problems and how they could be service connected. Get more than one doctor to say the same thing then write if two doctors say the same thing, then the reasonable doubt (§3.102) rule should apply and you state the probability is slim that the issue ISN'T service connected. Doctors don't like to be pushed to give tenuous opinions - unless they are lousy doctors who will swear to anything. And the bottom line is that the opinion won't be worth spit unless he has medical findings to support it. It is awfully easy to disregard a "definite" opinion given by some yo-yo who hasn't made a decent exam nor recited any findings to give that opinion a sound basis. You need to tell the doctor what you were exposed to in the military. If you have documentation, then show that to the doctor, then ask the doctor to assume you were exposed to this hazard in service, and this is his work and personal history where he did not have other similar exposures, then assuming those things to be true ask the doctor to express his opinion based on reasonable medical certainty as to the cause of his condition? If the doctor is uncertain, then you need to him/her to say he/she it is probable. Obviously the more evidence the better. The fact is that one opinion of probable, based on the right assumptions and medical facts and findings, is enough to carry the proof because probable means that it is more likely than not, and the legal system operates on belief that truth is that which is most likely. Medical facts means the doctor can't say it's a particular disease with out the required blood tests, cat/MRI scans, and whatever is necessary to prove the doctors opinion.

An example would be, if the doctor says you have cancer and when there has been no cat scan, no biopsy, no blood test of antigen - looking pale, or an undocumented complaint doesn't cut it. Or, to state it differently, when there are complaints that are not documented by physical findings, the doc can talk all day about how disabled this man is (because he says he is) , and that really is unpersuasive.

There are exceptions. Connective tissue diseases exist which cannot be documented. There a doctor can say in his/her letter to the adjudicator: "the complaints are persistent, and this person who used to be happy and outgoing and very active has now adopted a very restricted lifestyle. There is a recognized medical condition called xxx. It causes the kinds of things which force a person into that sort of lifestyle." There is no known test to

identify and diagnose this illness (the doctor needs to be direct the comments to either a Judge or adjudicator by talking in the first person) The doctor should state he “believes in this person” and he/she should state “If you also believe her complaints and that she now lives this lifestyle, then you have to believe she has this disabling condition.”

5. Get statements from anyone

Get statements from anyone who knows you and your issues. Write your own statement too! Have these individuals state how the problems affect you (example: It is hard to bend over, or squat, or hear, etc.). This includes your wife, kids, parents, co-workers even the guy/gal walking along the street. All of these people can contribute! All their statements are evidence that must be considered. If you have them put their phone number down on the statement and request the adjudicator to call (not if they have any questions), the adjudicator is required to call. If they don't call, you have grounds for appeal. The medical facts and findings speak louder than any of this testimony, and the veterans own testimony is quite powerful in describing the effect of this proven medical condition. The VA doctor's report that seeks to negate the claim is wide open to attack when he fails to do procedures or make determinative tests.

6. Get the Vet Center Records

If you have been going to a Vet Center, get their records. They are independent of the VA medical system (CAPRI) so you need to get a statement or copy of your provider's notes or both from your treating Social Worker.

7. Vocational Rehabilitation

If you have gone to Vocational Rehabilitation (Voc Rehab), you were evaluated by them too. Do a Privacy Act request and get all copies of evaluations and anything else (to include reports of contact [ROC]). The Voc Rehab evaluations carry some weight, since they are independent evaluations. Get copies of the contractor evaluations (the people that did the Voc Rehab screening) and the VA's Voc Rehab evaluations.

8. Legal Research

Go to <http://www.findlaw.com> or <http://www.veteransresources.net/database.html> or <http://www.va.gov/vbs.bva/> and look up all Board of Veteran Appeal, Court of Veteran Appeals, US District Court, US Court of Appeals and Supreme Court decisions that affect your issues. These legal opinions as well as the courts opinions narrows the focus of how the adjudicator can look at the evidence. Use these sites to support your other evidence. Do your own legal research! If you don't have access to the internet or are not internet savvy, you can get copies of any appeals and decisions from the VA. They can be requested from Veteran Benefits Office or the Adjudication Office. A simple phone call to one of those offices, explaining that you are requesting a copy of those records for your own file should be sufficient. Keep the information of who you talked with and their phone/fax numbers and addresses in your notebook for ready reference! Again, you may

need to provide this request in writing, but this can usually be accomplished by phone or fax. Some Service Officers from DAV, VFW, or American Legion will do this for you, but don't depend entirely on them! Some mental health records are kept separate from the main medical records, so again, you may need to call the Mental Health Clinic in your VA to request copies of those records from that office.

9. Statements From VA Personnel

If you have been seeing a counselor at the VA Hospital, then get him/her to write you a statement of how bad they think you are. Plus, write up a statement on your own, let the adjudicator know about your background, your stressors and how this affects your daily life. Counselors are sometimes skeptical that people are acting out, pretending, not real. If the guy is really bogus, you might do better not to ask, but in truth, further questioning may well reveal that the skeptical counselor really believes the guy is pretty bad off or he wouldn't be going through all of this. That it is the stress of daily life that drives him to it. And NO counselor ever treats a death threat as anything other than real!

10. SF 180

Use our system to create a customized order form to request information from your, or your relative's, military personnel records. You may use this system if you are: A military veteran, or Next of kin of a deceased, former member of the military The next of kin can be any of the following: surviving spouse that has not remarried, father, mother, son, daughter, sister, or brother. If you are not the veteran or next of kin, you must complete the Standard Form 180 (SF 180). You can obtain this form from Fax-on-Demand, or download it, then mail or fax it to the appropriate address on the form.

The SF 180 may be photocopied as needed. Please submit a separate request (either SF 180 or letter) for each individual whose records are being requested. You may submit more than one request per envelope or fax. How to Initiate a Request for Military Personnel Records: Click on the "Request Military Records" button to start. This will launch a separate window. Enter the required information in the system to create your customized request form. There are 4 steps that you need to navigate. The system will guide you through the steps and tell you exactly which step you are on. Print, sign and date the signature verification area of your customized form. If you don't have a printer, have a pen and paper handy and we will guide you through the process. This is important because the Privacy Act of 1974 (5 U.S.C. 552a) requires that all requests for records and information be submitted in writing. Each request must be signed and dated by the veteran or next of kin. Mail or fax your signature verification form to us, and we will process your request. You must do this within the first 20 days of entering your request, or your request will be removed from our system.

11. Reviewing Your Military Records

Review your military medical records and make a list of every ailment that you had while on active duty. Note each biohazardous exposure you may have had. For example, If you used cosmoline on everything to protect it from rust, and then we would be in carbon tetrachloride up to the elbows because that was what used to clean it off. Carbon tet is cancer producing. I am sure there are many other examples.

12. Cross Reference All your Military Ailments With Your Civilian Ailments

Cross reference all you military ailments with your civilian ailments. If the problem persists or a secondary issue has cropped up as a result of the issue that developed during your time in the military then you need to apply for that issue (as a secondary issue). An example of a secondary issue would be if you hurt your right knee and had to put weight on your left knee and now the knee is damaged. You can claim the left knee as a secondary issue to the injured right knee.

13. Downloading

Go to the VA web site and down load all the Fast Letters, Memo's and any other documentation that will support your case. www.va.gov.

14. Go to the DAV, PVA and any other VSO Web Site

Go to the DAV, PVA and any other VSO web sites and bookmark them (and down load anything related to your claims).

15. WARMS

Go to <http://www.warms.vba.va.gov/bookc.html>. Look up what your issue is and determine the percentage that you want to apply for. Now 98% of the Veteran Service Rep's (VSR's) will tell you not to give a percentage, but if you don't ask for a percentage and you are awarded 0% for an issue, you can't complain because they gave you exactly what you asked for. If the adjudicator denies your issue and you did not ask for a certain percentage, then you have to prove the VA didn't follow proper procedure (this is very hard to prove). Your VSR will tell you that the law can change. If it increases then just fax, email (w/receipt) or mail in an updated request. If the percentage decreases, you don't need to do anything. The Veterans Claims Assistance Act of 2000 allows the law that is most favorable to you to be applied to your claim so don't change your percentage.

16. Current law favors the Vet.

The VA fights it but you can use this to your advantage. Invoke VCAA. Read, understand and learn what VCAA can do for you. If you are within a year of the VCAA letter you received, then you have rights to reopen old cases, don't let the time limit pass.

17. You need to tell your story

You need to tell your story as to how you were injured. You need to compile all your evidence by issue. Yellow highlight those portions that pertain to you and your issues. Cite this in your narrative. You need to write up a narrative of how you were injured, under what circumstances (Who, What, When and How). List anyone who might have witnessed it. If you have a phone number or address, you need to provide that with your statement, cite the times you went to the medical facility, and later the follow-up care you have received from your private doctor. Invoke the reasonable doubt clause as well as all legal citations and regulations that support your claim VCAA. Site VBA and Court of Appeals legal cases that support your claim that you are entitled to a certain percentage rating. You will refer to evidence that you collected. Review the ratings percentages. Think of your worst day (pain, etc.) and rate yourself on that basis. After a few years your pain will probably be at that level, unless you can get the symptoms reversed somehow. Look up medical studies to support your claim and provide those studies to help in the adjudication process. VA or DoD or NIH medical studies are the best. It's hard to argue with yourself when yourself (the government) has come to the conclusion that the problem exists and what the symptoms are (which are the same symptoms you're reporting).

18. Eligibility

You are entitled to claim all periods of active duty, all periods covered under Vocational Rehabilitation and any injuries suffered under the care of the VA for the purposes of disability claims (issues). You need to list all periods of active duty, to include ADT and reserve time. There are limited benefits for non-active duty personnel. By stating the periods of active duty, and providing documentation (such as copies of orders), you will increase your chances of winning your claim.

19. C&P Examinations

Go to the C&P office at your local VA Hospital (if you're too far away, having them either email or fax to you the exam criteria). Go to your private doctor. Have him do the C&P exam the correct way. Make sure he is a specialist (preferably board certified) in the field. Then show him the exams you were given by the VA as well as all your personal medical records on this issue. Ask him if he concurs with their exam. If he doesn't, get him to put it in writing and cite the different tests that he performed to support his conclusions. If he can cite any medical studies, that would make his statements stronger too. Thus you beat them at their own game. When you write it up, make sure you had the "COMPLETE" C&P exam done by a private doc and the VA doc's refused to perform the proper tests. Under the reasonable doubt rule, you have proven your case, and they failed to prove theirs. Get the doctor to explain the disease and the disease process, and the way it develops and what it can lead to, as well as describing the tests that prove or disprove its existence. Let the doctor describe a little of the misery involved. Then after you have agreed as to what needs to be done schedule the client for that examination. That raises you to a reasonable level of function as to the medical aspects. This way the

doctor is explaining the disease to the adjudicator so the adjudicator will understand the disease and better informed and able to make a fair decision.

20. Idiot Proofing Your Claim

List every time you went to the doctor, provide a copy of that medical record, highlighted the medical record and bunched them together in a group so the claims examiner does not have to hunt for the information. You need to idiot proof the claim! You need to give your claim to a third party and see if they can find holes in your arguments. Try and anticipated the weaknesses in the claim and find the law or regulation that turned the weakness into a strong point.

21. Finalizing Your Claim

After you finished pulling your information together, you need to find an organization that will represent you before the Veterans Administration. If there is any supporting evidence you can not find, either the veterans representative can try and find it or the VA is required under the Veterans Claims Assistance Act to find the documentation for you. You need to point out what documentation they need to assist you and you need to provide them enough information necessary to find it (Who, What, When, Where and How Much).

B. Gulf War Specific Claims

1.Claims For Gulf War (GW)-Related Illnesses

Obtaining Adequate Treatment and Preparing Your Claim

a. Getting Acquainted with the VA

There are two sides to the VA... 1) Health care; and 2) Services (or, medical and non-medical). The doctors, nurses and healthcare providers make up the Health care side of the house. The service organizations (Disabled American Veterans, Veterans of Foreign Wars, and American Legion) are examples of the 'service'/non medical side of the house. It is important to understand that they are separate from the care and information of the medical side of the VA, and do not interact with one another. It is not your doctor's responsibility to evaluate your health for claims purpose. What your doctor enters into your records can/may be used for adjudicating you claim.

b. Getting Prepared

There are several things to do in getting your claim prepared for the Adjudication and/or Appeals Board. I suggest you begin by buying a large writing pad, notebook (to include a calendar and address book), a few blank envelopes, stamps and extra writing pens/pencils. You will be collecting information and documenting important things about your health which you will have organized in one place each time you make contact with the VA.

Save yourself some time and energy. PLEASE DO NOT just show up at the VA without giving some thought about what you are going to discuss with the doctor, and obtaining copies of records. If you are suffering with chronic fatigue and fibromyalgia, the last thing you want or need to do is hang around the VA unnecessarily! Much of what you need to accomplish can be done by phone and by regular mail! That is why it is SO important to have the phone/fax numbers and addresses readily at hand and in one place.

c. Records

It will be UP TO YOU to gather copies of any and all these records for your own files. Chances are, you will be the primary source of information in presenting or appealing your claim, so read these records for completeness, accuracy, and understanding. If there is something you don't understand, take your copies with you and ask your doctor about it/them. If there is something entered you don't agree with, you may consider requesting a second opinion from the VA or private physician. Some mental health records are kept separate from the main medical records, so again, you may need to call the Mental Health Clinic in your VA to request copies of those records from that office.

d. Regulations

One very important thing you can do to help yourself and your healthcare provider, is to be specific as to the purpose of your visit to the VA. Upon every doctor's visit, you will be tested for 'vitals' (blood pressure, pulse, temp, and respiration). At this time, the nurse will ask you 'why are you here'? Please take this time to let the nurse know that you are requesting consult and treatment to "**rule out Gulf War Illness**", as defined in the VA21 Policy Manual-10, Part III, pertaining to your symptoms and conditions and Persian Gulf Veterans. The nurse may have to ask you twice to repeat that again (because very few people know how and what to ask for), but it will help if you have it written out and entered in writing in your medical records. Once it is entered into your records, it then becomes the responsibility of the doctor to acknowledge and follow-up on your request. This will also help your doctor know exactly what he/she should be testing you for and where to go for official information on it.

Familiarize yourself with the VA21 Policy Manual-10, Part III, Chapters 1-5 and Change. You can find this at <http://www.va.gov/publ/direc/health/publications.asp>. Click on "Manuals", then scroll down to Manual M - 10, Part III. It will appear like this:
<http://www.va.gov/publ/direc/health/manual/100300.html> Environmental Agents Service, Persian Gulf Program
<http://www.va.gov/publ/direc/health/manual/100300C1.htm> Change 1
<http://www.va.gov/publ/direc/health/manual/100301.html> CHAPTER 1. PERSIAN GULF REGISTRY (PGR) PROGRAM
<http://www.va.gov/publ/direc/health/manual/100302.html> CHAPTER 2. PHASE I, PERSIAN GULF REGISTRY (PGR) EXAMINATION
<http://www.va.gov/publ/direc/health/manual/100303.html> CHAPTER 3. PHASE II, PERSIAN GULF UNIFORM CASE ASSESSMENT PROTOCOL (UCAP)

<http://www.va.gov/publ/direc/health/manual/100304.html> CHAPTER 4. PERSIAN GULF REFERRAL CENTERS (PGRCs)

<http://www.va.gov/publ/direc/health/manual/100305.html> CHAPTER 5. PERSIAN GULF REGISTRY III SPECIFICALLY FOR SPOUSES AND CHILDREN OF PERSIAN GULF WAR VETERANS

These chapters of the policy manual can be copied onto a 1.4Meg disk. To print them all out will require about 150 sheets of papers. I suggest you go to the initial trouble of copying and printing out a copy for yourself for quick access and easier reading. It will be easier to share this information with your doctor(s), service representative, or patient representative, as well.

Reading these policies can seem intimidating, at times, with language you may not fully understand. Don't be scared away from reading it for information you do understand! There will be much you can identify with, and use to question your doctor, or other staff members about, if you question the care you're getting. Chapter 3 of the policy manual lists the kinds of tests the VA should be performing on Gulf War Veterans, and identifies the symptoms and conditions found in Gulf War Illness. It also identifies the kinds of exposures recognized as possible sources for Gulf War Illness.

2. Steps to take specifically for a Gulf War Related Claim

The starting point for any claim for compensation or pension benefits administered by the Department of Veterans Affairs (VA) begins with an examination of the VA regulation(s) that effectuates such benefits. The Congressional statutes that authorize the VA to compensate veterans for disabilities can be found at title 38, U. S. Code, sections 1117 and 1118. Section 1117 allows for the payment of compensation to any GW veteran who suffers from an undiagnosed illness (or combination of undiagnosed illnesses) based upon a presumption that their disability(-ies) are a consequence of their service in the Southwest Asia theater of operations. Section 1118 establishes presumptive service connection (which eliminates the need to actually prove exposure to hazardous agents and a medical connection to a current disability) for illnesses associated with service in the Persian Gulf during GW that the VA determines have a "positive association" with exposure to a biological, chemical or other toxic agent, environmental or wartime hazard, or preventative medicine or vaccine known or presumed to be associated with service in the Southwest Asia theater of operations. The VA's recognition of presumptive illnesses must be based upon sound scientific studies, including the findings of the National Academy Sciences, the National Institutes of Health and the Presidential Advisory Committee on Gulf War Veterans' Illnesses.

The VA regulation that governs the adjudication of GW-related illness is located in title 38 of the U.S. Code of Regulations, at section 3.317. Based upon this regulation, the VA has established procedures for it claims adjudicators to follow when processing a claim for GW-related illnesses. These procedures are:

a. Having or Not Having GW Syndrome

The first thing to remember is that not all GW veterans have GW syndrome. Direct service connection for the purposes of veterans benefits is available through traditional avenues of veterans advocacy (*e.g.*, direct service connection, secondary service connection or aggravation of a service-connected disorder). This applies to both physical and psychiatric disorders.

b. Eligibility Requirements

The criteria for being considered a GW veteran you must have served on active duty between August 2, 1990 through a date yet to be determined in one of these countries Iraq, Kuwait, Saudi Arabia, the UAE, Bahrain, Qatar, Oman, the Gulfs of Aden and Oman, the Persian Gulf, the Arabian Sea, as well as the airspace above these locations.

c. What are the Sign(s) or Symptom(s)

What are the sign(s) or symptom(s) that may be indicative of undiagnosed illness. It is important to remember that the presumption of service connection does not apply to diagnosed conditions. Rather, the presumption requires that a symptom, or constellation of symptoms, defy diagnosis. The regulation identifies 13 symptoms that may be considered, however, this is not an exhaustive list. Non-listed symptoms may become the basis for an award of service connection as well. The list includes fatigue, skin symptoms, headache, muscle pain, joint pain, neurological symptoms, neuropsychiatric symptoms, upper and lower respiratory symptoms, sleep disturbances, gastrointestinal symptoms, cardiovascular symptoms, abnormal weight loss and menstrual disorders. As with any claim for service connection, documentation of symptomatology should primarily be from a physician or psychiatrist. The practitioner should be made aware of the rule that precludes diagnosed diseases. The doctor should also distinguish between those symptoms a veteran has that might be compatible with a particular diagnosis and those that are not. The veteran may then be able to seek traditional service connection for the diagnosed symptoms and presumptive section 3.317 service connection for the remaining symptoms. When presenting this type of medical evidence to the VA, the advocate should emphasize that the doctor's identification of a symptom or group of symptoms does not necessarily constitute a diagnosis of disease or a condition.

d. Refer to # 5 in How to File A Claim

Refer to #5 in how to file a claim. Regulations allow the VA to consider the veteran's own lay descriptions of his or her symptoms, particularly as to when the symptoms first appeared, their severity and how they affect the veteran's daily routine. Non-medical indicators, such as time lost from work, evidence that the veteran sought treatment for the symptoms and changes in the veteran's appearance, behavior and physical and emotional abilities, are especially noteworthy. Statements of family and friends are equally valuable. For example, a statement from a spouse that the veteran used to complain about headaches, joint pain, fatigue while deployed can support a claim of direct

service-connection; or a statement to the effect that the veteran complained about such symptoms after service can help establish the onset, length and severity of the symptoms in a claim for presumptive service connection for undiagnosed illness.

e. The Symptoms Must Be Chronic

The symptoms must be chronic. This means that they must persist for a period of at least six months, beginning on the date that the symptoms first appear. Disabilities may be considered chronic even if there are intermittent episodes of improvement and worsening.

f. The Symptoms Must Manifest before 12/31/06

Another requirement for service connection is that the disability resulting from the undiagnosed illness either appear during deployment in the Southwest Asia theater of operations, or become manifest to a degree of 10 percent or more not later than December 31, 2006. The 10 percent threshold refers to the level of disability assigned to service-connected disorders under the VA's schedule of rating disabilities, and essentially means that the severity of the disability meets the requirements for the VA's lowest level of compensation payments.

g. General Counsel

In August, 1998, the VA General Counsel issued a precedential (legally binding) opinion (No. 9-98) that served to clarify 38 C.R.F. § 3.317 means by providing presumptive service connection for chronic disabilities that cannot be attributed to any known clinical diagnosis. Essentially, the General Counsel concluded that § 3.317 authorizes compensation when illness cannot be diagnosed, even when the symptoms could, under other circumstances, be attributed to a known clinical diagnosis. However, once a diagnosis has been assigned, the presumption cannot attach, even if the diagnosis is described as a poorly defined illness (*e.g.*, fibromyalgia, chronic fatigue syndrome or Epstein-Barr Syndrome). Consequently, if there is a diagnosis, the VA will only consider the claim under the general theories of service connection. But, remember, as discussed above, if the veteran has other symptoms that cannot be assigned a diagnosis, then those symptoms can be considered under the § 3.317 provisions relating to undiagnosed illness.

h. Getting the Doctor to Properly Document Symptoms

Many doctors do not like to admit that they do not know what is going on. As a result, some will try to squeeze symptoms into a specific diagnosis or a poorly defined disorder. The veteran should have the doctor distinguish between diagnosis-related symptoms and other symptoms. The doctor should be asked if he or she can affirmatively state that a diagnosis cannot be rendered.

i. Two Options with Diagnosis or Diagnoses have been rendered

A veteran has essentially two options in situations where a diagnosis or diagnoses have been rendered.

1) Rebut

First, he or she can try to rebut the first doctor's opinion with another physician's to the effect that the symptoms cannot be associated with a particular diagnosis.

2) Abandon the § 3.317 undiagnosed illness presumption and seek service connection

Second, he or she can abandon the § 3.317 undiagnosed illness presumption and seek service connection under one of the traditional theories of service connection (*e.g.*, direct, secondary, aggravation). As a practical matter, once a diagnosis has been rendered, focus on direct service connection by obtaining evidence that links the current disorder to symptoms that manifested during the entire period of active service.

j. Get a GW Registry Examination

If the veteran is just beginning the claims process or does not have any medical evidence in support of his or her claim, then he or she **should request the VA to provide a GW registry examination**. The registry is available to any GW veteran and is designed to report and identify illnesses among such veterans. Even if the examination results are not favorable, they can be reviewed by a private physician for a rebuttal opinion. Finally, the regulation provides that even if the foregoing requirements are met, the VA can deny a claim for GW syndrome if there is affirmative evidence showing that the undiagnosed illness was not incurred during service in the GW; or that such illness was caused by a supervening condition or event after the veteran left the Southwest theater of operations; or the illness is the result of the veteran's own willful misconduct or substance abuse (alcohol and drugs).

These are the basics of a successful claim for GW syndrome. Veterans are urged to seek the assistance of experienced veterans service representatives to help them present their claims to the VA. Service representatives are familiar with the substantive and procedural legal requirements that must be satisfied in order to receive an award of service connection. They are professional veterans' advocates and can greatly increase the chances of prevailing. Their services are readily available and are provided without charge.

k. Logs

You will save yourself a lot of time and frustration by keeping track of the people you talk with and their phone numbers. Here is a sample of how you might begin collecting names and information which will help you when you have to refer back to them later:

VA Main Phone Number: 1-800-827-1000

Inspector General Complaint Center: 1-800-488-8244

Local VA Office:

Address:

Phone:

MEDICAL HEALTH CARE

OFFICE PHONE/FAX

ADDRESS

POINT OF CONTACT

APPOINTMENTS:

DENTAL:

EYE:

LAB:

MENTAL HEALTH CLINIC:

PHARMACY:

PROSTHETICS:

RECORDS:

X-RAY:

OTHER:

OTHER:

OTHER:

NON MEDICAL

OFFICE PHONE/FAX

ADDRESS

POINT OF CONTACT

PATIENT REPRESENTATIVE:

AUTHORIZATIONS:

BENEFITS:

TRAVEL:

OTHER:

OTHER:

OTHER:

OTHER:

SERVICE ORGANIZATIONS

OFFICE PHONE/FAX

ADDRESS

POINT OF CONTACT

Disabled American Veterans:

Veterans of Foreign War:

American Legion:

Other:

I suggest keeping a list of references with outside names and numbers handy as well:

NEARBY HOSPITALS:

Name of Hospital: _____

Emergency: _____

During Normal Office Hours: _____

Doctor: _____

Name of Hospital: _____

Emergency: _____

During Normal Office Hours: _____

Doctor: _____

EMERGENCY CONTACTS:

Name: _____

Relationship: _____

Phone: _____

Address: _____

Name: _____
Relationship: _____
Phone: _____
Address: _____
Name: _____
Relationship: _____
Phone: _____
Address: _____

PRIVATE HEALTH INSURANCE:

Name: _____
Policy Number: _____
Phone: Fax: _____
Name: _____
Policy Number: _____
Phone: Fax: _____
Name: _____
Policy Number: _____
Phone: Fax: _____

SOCIAL SECURITY OFFICE:

Address: _____
Phone: Fax: _____

PRIVATE DOCTOR:

Name: _____
Address: _____
Phone: Fax: _____
Name: _____
Address: _____
Phone: Fax: _____
Name: _____
Address: _____
Phone: Fax: _____

LAWYER:

Name: _____
Address: _____
Phone: Fax: _____

SENATOR/CONGRESSMAN:

Name: _____
Address: _____
Phone: Fax: _____
Name: _____
Address: _____

Phone: Fax:

Prior Military Info (You may have been active in more than one branch of military)

Enlistment Date:

Branch/Unit of Assignment:

Address:

Phone:

Date of Discharge:

Enlistment Date:

Branch/Unit of Assignment:

Address:

Phone:

Date of Discharge:

Enlistment Date:

Branch/Unit of Assignment:

Address:

Phone:

Date of Discharge:

Enlistment Date:

Branch/Unit of Assignment:

Address:

Phone:

Date of Discharge:

MEDALS/CITATIONS:

WARS/CONFLICTS:

BUDDIES/COMRADES:

Name:

Relationship:

Phone:

Address:

Name:

Relationship:

Phone:

Address:

Name:

Relationship:

Phone:

Address:

Chapter 5 OTHER GULF WAR ISSUES

I. How to Qualify for Social Security Benefits

A. Military and Social Security Benefits

The earnings of people who serve in the military services on active duty or on active duty for training have been covered under Social Security since 1957. Inactive duty service in the armed forces reserves (such as weekend drills) has been covered by Social Security since 1988. However, people who served in the military before 1957 did not pay into Social Security directly, but their records are credited with special earnings for Social Security purposes that count toward any benefits that might be payable. Additional earnings credits are given to military personnel depending on when they served. This fact sheet explains how and when these special earnings are credited and provides other general information military personnel need to know about the benefits available from Social Security.

1. Paying Social Security And Medicare Taxes

While you're in the military service (from 1957 on), you pay Social Security taxes the same way civilian employees do. Those taxes are deducted from your pay and an equal amount is paid by the U.S. government as your employer. In 1999, the tax rate is 7.65 percent up to a maximum of \$72,600. If you earn more than that, you continue to pay the Medicare portion of the tax, 1.45 percent, on the rest of your earnings.

2. Social Security "Credits"

You earn Social Security credits when you work in a job covered by Social Security. Before any benefits can be paid on your record, you must have credit for a certain amount of work covered by Social Security. In 1999, you earn four credits (the maximum) if your annual earnings are \$2,960 or more. (You earn one credit for each \$740.) The amount needed for each credit will increase in future years to reflect increases in average wages. The number of credits you need to qualify for Social Security depends on your age and the type of benefit you might be eligible for. Nobody needs more than 40 credits (10 years of work or military service) to be eligible for Social Security. In some situations, you can qualify with less than 40 credits.

3. Earnings Added To Military Records For Social Security Purposes

The "credits" mentioned in the previous section determine if you are eligible for Social Security. The amount you get from Social Security depends on your earnings averaged over much of your working lifetime. Generally, the higher your earnings, the higher your Social Security benefit.

Under certain circumstances, special earnings can be credited to your military pay record for Social Security purposes. These extra earnings may help you qualify for Social Security or increase the amount of your Social Security benefit. The extra earnings credits are granted for periods of active duty or active duty for training. (No additional earnings are granted for inactive duty training, and Social Security cannot add extra earnings credits to your earnings record until you file for Social Security benefits.) Here's when the additional earnings are granted:

a. Service In 1978 And Later

For every \$300 in active duty basic pay, you are credited with an additional \$100 in earnings up to a maximum of \$1,200 a year. If you enlisted after September 7, 1980, and didn't complete at least 24 months of active duty or your full tour, you may not be able to receive the additional earnings. Check with Social Security for details.

b. Service In 1957 Through 1977

You are credited with \$300 in additional earnings for each calendar quarter in which you received active duty basic pay.

c. Service In 1940 Through 1956

If you were in the military during this period, including attendance at a service academy, you did not pay Social Security taxes. However, your Social Security record may be credited with \$160 a month in earnings for military service from September 16, 1940, through December 31, 1956, under the following circumstances:

- you were honorably discharged after 90 or more days of service; or
- you were released because of a disability or injury received in the line of duty; or
- you are still on active duty; or
- you are applying for survivors benefits and the veteran died while on active duty.

You **cannot** receive these special earnings credits if you're already receiving a federal benefit based on the same years of service. But there is one exception to this rule: if you were on active duty after 1956, you can still get the special earnings for 1951 through 1956, even if you're receiving a military retirement based on service during that period.

4. Applying For Social Security Benefits

There are many kinds of benefits available from Social Security besides those for retirement and disability. Members of your family and your dependents can receive survivors benefits if you should die. There's also Medicare coverage and Supplemental Security Income (SSI) payments. For more information about these benefits, ask Social Security for a copy of the booklet, [*Understanding The Benefits*](#) (Publication No. 05-10024).

When you apply for Social Security benefits, you'll be asked for proof of your military service (DD Form 214), or information regarding your reserves or National Guard service.

5. If You Get Both Social Security And Military Retirement

You can get both Social Security benefits and military retirement. Generally, there is no offset of Social Security benefits because of your military retirement. You'll get your full Social Security benefit based on your earnings. However, your Social Security benefit may be reduced if you also receive a government pension based on a job in which you didn't pay Social Security taxes. Ask Social Security for a copy of the fact sheet, [Pension From Work Not Covered By Social Security](#) (Publication No. 05-10045).

Social Security survivors benefits may affect benefits payable under the optional Department of Defense Survivors Benefit Plan. Check with the Department of Defense or your military retirement advisor for more information.

6. SSI For Children

SSI pays monthly benefits to people with low incomes and limited assets who are 65 or older or blind or disabled. If you have a child who gets SSI, those payments may continue if you're stationed outside the United States (including Puerto Rico and U.S. territories and possessions) while in military service and the child lives with you. Your child must have received SSI the month before you reported for duty.

7. A Word About Medicare

If you have health care protection from the Department of Veterans Affairs (VA) or under the CHAMPUS or CHAMPVA program, your health benefits may change or end when you become eligible for Medicare. You should contact the VA, the Department of Defense or a military health benefits advisor for more information.

8. For More Information

You can get recorded information about Social Security coverage 24 hours a day by calling Social Security's toll-free number, **1-800-772-1213**. You can speak to a service representative between the hours of 7 a.m. and 7 p.m. on business days. Our lines are busiest early in the week and early in the month, so, if your business can wait, it's best to call at other times. Whenever you call, have your Social Security number handy.

People who are deaf or hard of hearing may call our toll-free "TTY" number, 1-800-325-0778, between 7 a.m. and 7 p.m. on business days.

You also can reach us on the Internet. Type <http://www.ssa.gov> to access Social Security information.

The Social Security Administration treats all calls confidentially--whether they're made to our toll-free numbers or to one of our local offices. We also want to ensure that you receive accurate and courteous service. That's why we have a second Social Security representative monitor some incoming and outgoing telephone calls.

B. Organizations to Find Legal Representation for Social Security Claims

[NOSSCR: National Organization of Social Security Claimants' Representatives](http://www.nosscr.org/) - <http://www.nosscr.org/>

Established in 1979, the National Organization of Social Security Claimants' Representatives is an association of over 3,300 attorneys and paralegals who represent Social Security and Supplemental Security Income claimants. Our members are committed to providing high quality representation for claimants, to maintaining a system of full and fair adjudication for every claimant, and to advocating for beneficial change in the disability determination and adjudication process. To reach NOSSCR: (800) 431-2804, or e-mail: nosscr@worldnet.att.net.

C. General Information

To qualify for benefits, you must first have worked in jobs covered by Social Security. Then you must have a medical condition that meets Social Security's definition of disability. In general, we pay monthly cash benefits to people who are unable to work for a year or more because of a disability. <http://www.socialsecurity.gov>

Benefits usually continue until you are able to work again on a regular basis. There are also a number of special rules, called "work incentives," that provide continued benefits and health care coverage to help you make the transition back to work.

If you are receiving Social Security disability benefits when you reach age 65, your disability benefits automatically convert to retirement benefits, but the amount remains the same.

Let's look at the requirements more closely:

In addition to meeting our definition of disability, you must have worked long enough--and recently enough--under Social Security to qualify for disability benefits.

Social Security work credits are based on your total yearly wages or self-employment income. You can earn up to four credits each year. The amount needed for a credit changes from year to year. In 2003, for example, you earn one credit for each \$890 of wages or self-employment income. When you've earned \$3,560, you've earned your four credits for the year.

The number of work credits you need to qualify for disability benefits depends on your age when you become disabled. Generally, you need 40 credits, 20 of which were earned in the last 10 years ending with the year you become disabled. However, [younger workers may qualify with fewer credits](#).

IMPORTANT: Remember that whatever your age is, you must have earned the required number of work credits within a certain period ending with the time you become disabled. Your Social Security Statement shows whether you meet the work requirement at the time it was prepared. If you stop working under Social Security after the date of the Statement, you may not continue to meet the disability work requirement in the future.

The definition of disability under Social Security is different than other programs. Social Security pays only for total disability. **No benefits are payable for partial disability or for short-term disability.**

Disability under Social Security is based on your inability to work. We consider you disabled under Social Security rules if you cannot do work that you did before and we decide that you cannot adjust to other work because of your medical condition(s). Your disability must also last or be expected to last for at least one year or to result in death.

This is a strict definition of disability. Social Security program rules assume that working families have access to other resources to provide support during periods of short-term disabilities, including workers' compensation, insurance, savings and investments.

To decide whether you are disabled, we use a step-by-step process involving five questions.

They are:

1. Are you working?

If you are working in 2002 and your earnings average more than \$780 a month, you generally cannot be considered disabled. If you are working in 2003 and your earnings average more than \$800 a month, you generally cannot be considered disabled. If you are not working, go to Step 2.

2. Is your condition "severe"?

Your condition must interfere with basic work-related activities for your claim to be considered. If it does not, SSA will find that you are not disabled. If your condition does interfere with basic work-related activities, go to [Step 3](#).

Is your condition found in the list of disabling conditions?

For each of the major body systems, SSA maintains a list of medical conditions that are so severe they automatically mean that you are disabled. If your condition is not on the list, SSA has to decide if it is of equal severity to a medical condition that is on the list. If it is, SSA will find that you are disabled. If it is not, then go to Step 4.

3. Can you do the work you did previously?

If your condition is severe but not at the same or equal level of severity as a medical condition on the list, then SSA must determine if it interferes with your ability to do the work you did previously. If it does not, your claim will be denied. If it does, proceed to Step 5.

4. Can you do any other type of work?

If you cannot do the work you did in the past, SSA wants to see if you are able to adjust to other work. SSA considers your medical conditions and your age, education, past work experience and any transferable skills you may have. If you cannot adjust to other work, your claim will be approved. If you can adjust to other work, your claim will be denied.

Most people who receive disability benefits are workers who qualify on their own records and meet the work and disability requirements we have just described. However, SSA wants to point out some situations you may not know about:

If something happens to you, benefits may be payable to your widow or widower with a disability if the following conditions are met:

- He or she is between ages 50 and 60.
- The widow or widower meets the definition of disability for adults.
- The disability started before your death or within seven years after your death.

NOTE: If your widow or widower caring for your children receives Social Security benefits, he or she is eligible if disability starts before those payments end or within seven years after they end.

You should apply at any Social Security office as soon as you become disabled. You may file by phone, mail or by visiting the nearest office. You can find out the name and address of the [closest Social Security office here](#). If you want to apply by phone call our toll-free number, **1-800-772-1213**, and we will set up a time for your local Social Security office to contact you.

If your application is approved, your first Social Security benefit will be paid for the sixth full month after the date we find that your disability began.

For example, if your disability began on June 15, 2002, your first benefit would be paid for the month of December 2002, the sixth full month of disability. Social Security benefits are paid in the month following the month for which they're due. This means that the benefit due for December would be paid to you in January 2003, and so on.

In most cases, you will continue to receive benefits as long as you are disabled. However, there are certain circumstances that may change your continuing eligibility for disability benefits. For example, your health may improve to the point where you are no longer

disabled. Or, like many people, you would like to go back to work rather than depend on your disability benefits. SSA encourages you to do so, and they have special rules called "work incentives" that can help you make the transition back to work. These incentives include, but are not limited to, continued monthly benefits and Medicare coverage while you attempt to work on a full-time basis.

The law requires that SSA review your case from time to time to verify that you are still disabled. SSA will notify you if it is time to review your case, and we still keep you informed about your benefit status. You should also be aware that you are responsible for letting us know if your health improves or you go back to work.

In general, your benefits will continue as long as you are disabled. However, the law requires that SSA review your case periodically to see if you are still disabled. How often SSA will review your case depends on whether your condition is expected to improve.

If medical improvement is "expected," your case will normally be reviewed within six to 18 months after your benefits start.

If medical improvement is "possible," your case will normally be reviewed no sooner than three years.

If medical improvement is "not expected," your case will normally be reviewed no sooner than seven years.

Two things can cause us to decide that you are no longer disabled and to stop your benefits.

Your benefits will stop if you work at a level SSA considers "substantial." In 2003, average earnings of \$800 or more per month (\$1,330 or more per month if you are blind) are usually considered substantial.

Your disability benefits will also stop if we decide that your medical condition has improved to the point that you are no longer disabled.

You are responsible for promptly reporting any improvement in your condition, if you return to work, and certain other events as long as you are receiving disability benefits. The booklet SSA sends to you when your application is approved explains what you need to report to us.

If you're like most people, you would rather work than try to live on disability benefits. There are a number of special rules that provide cash benefits and Medicare coverage while you try to work. SSA calls these rules "work incentives." For more information about Social Security work incentives, see [Working While Disabled...How We Can Help](http://www.socialsecurity.gov/pubs/10095.html) .
<http://www.socialsecurity.gov/pubs/10095.html>

Social Security Disability (SSD) for People with Mood Disorders.
<http://psycom.net/depression.central.ssd.html>

II. Simple Steps To Use When Fighting Your SSD Case

by Linda Fullerton ljfullerton919@hotmail.com President/Co-Founder - Social Security Disability Coalition

A. Social Security pays only for total disability

Social Security pays only for total disability. No benefits are payable for partial disability or for short-term disability. You are disabled under Social Security rules if you cannot do work that you did before and if they decide that you cannot adjust to other work because of your medical condition(s). You have a valid claim if you have been disabled or are expected to be disabled for 12 consecutive months, or your condition will result in your death. You should file your claim within 12 months of the date you first became disabled - Social Security will only pay monetary benefits for a maximum of 12 months prior to the date of your application. This is true regardless of what date you became disabled. To decide whether you are disabled, SSD uses a step-by-step process involving five questions. Are you working? - If you are working and your earnings average more than \$800 a month, you generally cannot be considered disabled. If you are not working is your condition "severe"? Your condition must interfere with basic work-related activities for your claim to be considered. If it does not, they will find that you are not disabled. Is your condition found in the list of disabling conditions? For each of the major body systems, SSD maintains a list of medical conditions that are so severe they automatically mean that you are disabled (The "Bluebook of Listings and Impairments"). If your condition is not on the list, they have to decide if it is of equal severity to a medical condition that is on the list. If it is, they will find that you are disabled. Can you do the work you did previously? If your condition is severe but not at the same or equal level of severity as a medical condition on the list, then they must determine if it interferes with your ability to do the work you did previously. If it does not, your claim will be denied. Can you do any other type of work? If you cannot do the work you did in the past, SSD looks to see if you are able to adjust to other work. They consider your medical conditions and your age, education, past work experience and any transferable skills you may have. If you cannot adjust to other work, your claim will be approved. If you can adjust to other work, your claim will be denied. If possible get a copy of your personnel file from your previous employer (contact the human resources dept - give them authorization to send it to you and tell them why you want it - for SSD reasons) documenting how many days you were absent from work (attendance records, sick days, doctor's excuses, leave of absence, warning letters etc) due to your illnesses before you could not work any longer. Keep a copy for yourself send one to SSD.

SSR 82-53 TITLES II AND XVI: Basic Disability Evaluations Guides
http://www.ssa.gov/OP_Home/rulings/di/01/SSR82-53-di-01.html

SSR 83-20: TITLES II AND XVI: Onset of Disability
http://www.ssa.gov/OP_Home/rulings/di/01/SSR83-20-di-01.html

SSR 86-8: TITLES II AND XVI: The Sequential Evaluation Process
http://www.ssa.gov/OP_Home/rulings/di/01/SSR86-08-di-01.html

SSR 82-52 TITLES II AND XVI: Duration of the Impairment
http://www.ssa.gov/OP_Home/rulings/di/01/SSR82-52-di-01.html

SSR 73-7c: SECTION 223(d) - (42 U.S.C. 443(d) – Disability Insurance Benefits – Duration of Inability to Engage in Substantial Gainful Activity
http://www.ssa.gov/OP_Home/rulings/di/03/SSR73-07-di-03.html

SSR 85-28: TITLES II AND XVI: Medical Impairments That Are Not Severe
http://www.ssa.gov/OP_Home/rulings/di/01/SSR85-28-di-01.html

SSR 88-3c: SECTIONS 223(d) AND 1614(a)(3) Of the Social Security Act (42 U.S.C. 423(d) AND 1382c(a)(3)) Disability – Validity of the Severity of Impairment Regulation
http://www.ssa.gov/OP_Home/rulings/di/01/SSR88-03-di-01.html

SSR 82-63: TITLES II AND XVI: Medical-Vocational Profiles Showing an Inability to Make an Adjustment to Other Work
http://www.ssa.gov/OP_Home/rulings/di/02/SSR82-63-di-02.html

SSR 82-62: TITLES II AND XVI: A Disability Claimant's Capacity to do Past Relevant Work, In General http://www.ssa.gov/OP_Home/rulings/di/02/SSR82-62-di-02.html

NOTE: Once you are approved there is no time limit on disability benefits. You will continue to receive a disability benefit as long as you continue to be disabled and otherwise meet work or other eligibility requirements. However, your case will be reviewed periodically to see if there has been any improvement in your condition and whether you are still eligible for benefits. If you are still eligible when you reach full retirement age, disability benefits will automatically be converted to retirement benefits.

B. Take as active a roll as possible in fighting your own case

If you cannot handle it get a family member to help you the less YOU do the longer it will take to process your claim. The actual time it takes to process your claim may be more or less based on the State you live in - disability determinations are made by a Disability Determination Service in the State where the disability applicant lives. These State agencies are required to comply with federally prescribed policies and procedures, which helps assure that the programs are administered consistently from State to State.

The nature of your disability; how quickly SSD can obtain medical evidence from your doctor or other medical source; and whether it is necessary to send you for a medical examination. As further assurance of consistency, samples of the State agencies' determinations undergo an extensive quality assurance process performed by Federal reviewers (Currently 7 out of 10 applications get randomly selected by computer for this process). Unfortunately, this additional review may cause delays in some cases.

FLOW OF CASES THROUGH THE DISABILITY PROCESS - Fiscal Year 2002 Data
http://www.ssa.gov/disability/disability_process_welcome_2002.htm

MAKE SURE TO CHECK OUT THIS CHECK OUT THIS CHART:
http://www.ssa.gov/disability/disability_process_frameset.html

NOTE: This data is what you are REALLY up against when fighting a claim - taken right off of SSA's own website. No matter what anyone (SSD workers, lawyers etc) tells you, these figures are the true facts. Also the GAO considers Social Security Disability to be a HIGH RISK area for 2003 so things are expected to be much worse when the 2003 reports come out. This information is important - not to scare or discourage you, but to show how bad the system is and how important it is that you do EVERYTHING possible here to speed up your claim so it does not fall into those statistics. The current system as it stands is set up to discourage you so they can rob you of your money or in hopes that you will die in the process of trying to get your benefits - then they don't have to pay you! DON'T GIVE THEM THAT SATISFACTION - DON'T BE A VICTIM OF THE SYSTEM - TAKE ACTION NOW - DON'T BE SAD - GET MAD!!!!

C. Have Doctors are Supportive of Your Claim

If your primary care doctor or any other doctor is unsupportive of you/your diseases/SSD claim - get rid of them immediately and find a new one. You will almost surely be denied if your primary care physician/specialists do not support your claim. Some tips on "How To Talk With Your Physician About

Supporting Your Disability Claim: can be found at:
<http://www.immunesupport.com/library/showarticle.cfm?ID=3022>

SSR 96-2p: POLICY INTERPRETATION RULING TITLES II AND XVI: Giving Controlling Weight to Treating Source Medical Opinions
http://www.ssa.gov/OP_Home/rulings/di/01/SSR96-02-di-01.html

SSR96-5p: POLICY INTERPRETATION RULING TITLES II AND XVI: Medical Source Opinions on Issues Reserved to the Commissioner
http://www.ssa.gov/OP_Home/rulings/di/01/SSR96-05-di-01.html

D. Seeing Specialists

Make sure you see and get properly diagnosed by any specialists for your medical problems - make sure to mention/document all PHYSICAL and MENTAL problems you may have - ALL are important factors when filing for SSD. (EXAMPLE - Many people who are disabled suffer from depression in some form as a result - so it is important that if you have that problem that is diagnosed properly/documentated and included in your list of illnesses). Try all possible options to treat your disease before filing for a claim - SSD needs to see that you are trying to get better but that treatments have little or no affect on your condition.

SSR 96-4p: POLICY INTERPRETATION RULING TITLES II AND XVI: Symptoms, Medically Determinable Physical and Mental Impairments, and Exertional and Nonexertional limitations http://www.ssa.gov/OP_Home/rulings/di/01/SSR96-04-di-01.html

E Get Copies of ALL Your Medical Records

Get copies of ALL your medical records and tests - keep a set for yourself and send a set to SSD

F. Make Copies of All of Your Records

Anytime you fill out any paperwork for SSD make copies of it for yourself before sending it back to them

G. Filling Out Forms

When filling out SSD forms answer ALL questions as to how you would feel on your WORST day. NEVER downplay your symptoms or exaggerate them either Explain in detail the frequency, severity and duration of your symptoms and limitations and how they limit your ability to work and function on a daily basis. If you have problems filling out their forms (due to concentration, memory, pain) - make sure you mention that on the form and if it took you several days/weeks to fill them out, or if you had to have someone else do it for you - mention that too.

SSR 96-3p: POLICY INTERPRETATION RULING - TITLES II AND XVI: Considering Allegations of Pain and other Symptoms in Determining Whether a Medically Determinable Impairment is Severe. http://www.ssa.gov/OP_Home/rulings/di/01/SSR96-03-di-01.html

SSR 96-7p: POLICY INTERPRETATION RULING TITLES II AND XVI: EVALUATION OF SYMPTOMS IN DISABILITY CLAIMS: Assessing the Credibility of an Individual's Statements. http://www.ssa.gov/OP_Home/rulings/di/01/SSR96-07-di-01.html

H. Make a List of ALL Medications/Supplements You Take

Make a list of ALL medications/supplements you take. Be sure to list anything that you are allergic to or other reason why you cannot take a medication/treatment that a doctor has recommended (do not use the reason that you cannot afford it). Always ask for and have your doctor give you SAMPLES whenever possible especially for new medicines that they may want you to try - they get tons of them from drug reps - you just need to ask for them. If for some reason they don't have samples - get a trial prescription (a few days/one week) so you are not paying tons of money for something you may not be able to take because of allergies or nasty side effects. Keep a daily diary of the intensity and frequency of your symptoms, pain and how it limited your activities that day. Note the things/activities that may have made your symptoms worse. Make copies of all of this information - keep one for yourself, give one to each of your doctors and send one to SSD.

I. Go through the Doctor's Bluebook of Listings

Find all the listings you meet and copy and paste them into a document - keep a copy for yourself - send one to SSD

<http://www.ssa.gov/disability/professionals/bluebook>

<http://www.ssa.gov/disability/professionals/bluebook/index.htm>

NOTE: Fibromyalgia/CFS claimants - see these documents:

SSR 99-2p: POLICY INTERPRETATION RULING TITLES II AND XVI: Evaluating Cases Involving Chronic Fatigue Syndrome (CFS)

http://www.ssa.gov/OP_Home/rulings/di/01/SSR99-02-di-01.html

Chronic Fatigue Syndrome and Fibromyalgia Patients: Should You File a Disability Claim?

<http://www.immunesupport.com/library/showarticle.cfm/id/3900>

Completing Disability Forms: Five Critical Tips to Keep in Mind for Chronic Fatigue Syndrome and Fibromyalgia Patients

<http://www.immunesupport.com/library/showarticle.cfm/ID/3487>

J. Get copy of Residual Functional Capacity Questionnaire

Make copies for ALL your doctors to fill out and in your own words make up a letter answering all the questions - make sure to include how these diseases affect your life. You may wish to revise this sample to better reflect your own limitations, then ask your doctor to fill out your own version instead of whatever DDS sends:

<http://pbcers.org/rfcq.htm>. A guide for providers on what to include in a report on your disability - read this and write your own to give to your doctor so he knows the answers:
<http://www.ssa.gov/disability/professionals/greenbook/ce-adult.htm>
<http://www.ssa.gov/disability/professionals/greenbook/ce-evidence.htm>
<http://www.ssa.gov/disability/professionals/greenbook/ce-guidelines.htm>
<http://www.ssa.gov/disability/professionals/greenbook/ce-general.htm>

SSR 96-8p: POLICY INTERPRETATION RULING TITLES II AND XVI: Assessing Residual Functional Capacity in Initial Claims

http://www.ssa.gov/OP_Home/rulings/di/01/SSR96-08-di-01.html

SSR 96-9p: POLICY INTERPRETATION RULING TITLES II AND XVI: Determining Capability To Do Other Work-Implications Of A Residual Functional Capacity For Less Than a Full Range of Sedentary Work

http://www.ssa.gov/OP_Home/rulings/di/01/SSR96-09-di-01.html

SSR 85-16: TITLES II AND XVI: Residual Functional Capacity For Mental Impairments

http://www.ssa.gov/OP_Home/rulings/di/01/SSR85-16-di-01.html

K. Write All Your Elected Officials

Write all your elected officials and if you get any responses make copies - keep a set for yourself - send a set to SSD <http://www.congress.org>

L. Helping Doctors Fill Out Paperwork

Offer to help your doctors fill out any paperwork that they may get from you or SSD.

M. Get Statements from Family, Friends, Co-Workers and Doctors

Ask your close family, friends, previous co-workers and doctors to write letters (on 8-1/2 x 11" paper) on your behalf stating how your illnesses affect your life and how they have changed you. Make sure they mention both physical and mental changes in your condition. The letters should include their background/relationship to you - how they know you, how long they have known you and your conditions. They should end with a statement as to why in their opinion you cannot work ANY type of job. Have them get the document notarized (many banks will do this for free) Up to four is sufficient. Make copies - keep a set for yourself and send one to SSD.

N. Keeping Doctors Appointments

If SSD asks you to see any doctors make sure you keep the appointment and audio/video tape record the visit - get copies of all that doctor's findings. Be very honest and specific about your condition. DO NOT wear make up or dress fancy - act, dress, look, function like you would on an average day. Make sure SSD doctors know that you have followed all medical recommendations you were given by your doctors and what affect they are

having on your condition. If you have not been able to follow doctors recommendations due to side affects that have been problematic to your condition make sure you alert the SSD doctor to that as well. If possible have someone drive you to the appointment who knows about your medical conditions (family/close friend) and whom can also tell the doctor how these diseases affect your life.

SSR 96-6p: POLICY INTERPRETATION RULING TITLES II AND XVI:
Consideration Of Administrative Findings of Fact By State Agency Medical and Psychological Consultants and Other Program Physicians and Psychologists At The Administrative Law Judge and Appeals Coucil Levels of Administrative Review;
Medical Equivalence

http://www.ssa.gov/OP_Home/rulings/di/01/SSR96-06-di-01.html

O. If Your Case Has Been Denied

If your case has been denied - file your appeal IMMEDIATELY in person if possible (no longer than 60 days). VERY IMPORTANT: get copies of all the records in your SSD file including ALL claim examiners notes and any doctors reports from doctors that SSD had you see - it is your right to have them.

Note: federal law allows you to reopen the prior claim within one year of the date of the initial denial for any reason. You can reopen a previous claim within four years of the initial denial if SSD finds good cause to do so. Even if you cannot reopen a previous claim you should be able to file a new SSD application if it has been five years or less since you last worked full time.

SSR 92-1p: POLICY INTERPRETATION RULING: Request Under the Privacy Act or The Freedom of Information Act for Access to Records and For Disclosure Of Material Maintained by the Office of Hearings and Appeals

http://www.ssa.gov/OP_Home/rulings/di/08/SSR92-01-di-08.html

P. Use the SSD Website

Use the SSD website - it has lots of useful info and never be afraid to contact them by phone to ask questions as to the status of your claim: Website: <http://www.ssa.gov> or Phone: 1-800-772-1213

You can conduct your Social Security business 24 hours a day, including weekends and holidays. You can ask to speak to a representative from 7 AM to 7 PM on business days. Some of the services available include scheduling an appointment, changing your address, and signing up to send your Social Security check directly to your bank. You can also use their automated services 24 hours a day to request services such as a replacement Medicare card or Social Security Statement, and a variety of other forms and publications. Their phone lines are busiest early in the week and early in the month, so if your business can wait, it's best to call at other times.

Q. SSA IG

If you feel that you are being treated improperly report it immediately to the SSD Office of Inspector General and Office of Public Inquiry:

Inspector General's Office
Allegation Management Division
PO Box 17768
Baltimore MD 21235
Phone: 1-800-269-0271/410-965-8882
Rene Johns - Phone: 410-966-9158
Danny Johnson - Phone: 410-966-9158
Fax: 410-966-9201/410-597-0118
E-mail: oig.hotline@ssa.gov

Social Security Administration Office of Public Inquiries
Phone: 410-966-3000
Contact: Mary Ann

R. Utility Shutoff

If you are facing utility shutoff, foreclosure on your house or bankruptcy due to waiting for your claim to be processed - make copies of any letters/notices and send them to SSD/elected officials and your lawyer
if you have one requesting a dire needs review of your case

S. Pre-Hearing Review

If you have been denied and have been waiting too long to get a hearing - look into getting what is called a Pre-Hearing review of your case.

SSR 97-2p: POLICY INTERPRETATION RULING TITLE II AND TITLE XVI:
Prehearing Case Review by Disability Determination Services
http://www.ssa.gov/cgi-bin/cqcggi/@ssa.env?CQ_SESSION_KEY=BOGBIVBZRZWG&CQ_CUR_DOCUMENT=3&CQ_RESULTS_DOC_TEXT=YES

T. Taping Testimony

If you have a hearing scheduled bring any new medical evidence, family, friends, doctors to speak on your behalf and ask to record it on audio/video tape. Be very honest and specific about your condition. DO NOT wear make up or dress fancy - act, dress, look, function like you would on an average day. If possible have someone drive you to the hearing who knows about your medical conditions (family/close friend) and can also tell the judge how these diseases affect/have changed your life. Make sure judge knows you have followed all medical recommendations you were given by your doctors and what affect they are having on your condition. If you have not been able to follow doctors

recommendations due to side affects that have been problematic to your condition make sure you alert the judge to that as well.

U. Representation

You may chose to fight your case alone (it is NOT mandatory to have a lawyer) or seek legal/advocate representation. You can hire a lawyer - very important to actively keep after a lawyer if you hire one. Since they get paid 25% of your retro pay or current cap of \$5300 it is in their best interest for your case to drag on - the longer it takes to process the more they get. You may be able to take advantage of legal-aid or pro-bono services.

You can get a paralegal or in some cases free

advocacy from the Centers for Independent Living in your area:

http://www.abledata.com/Site_2/ind_lvng.htm

Disability Legal and Advocacy Resources:

<http://www.makoa.org/legal.htm>

III. Social Security Programs and Web Resources

Applications for this program can be obtained through this website:

<http://www.ssa.gov/applyforbenefits/>

For more information on this program and how to apply, call Social Security's toll-free number: 800-772-1213. People who are deaf or hard of hearing may call Social Security's toll-free TTY number: 800-325-0778

Social Security Disability Coalition: FREE knowledge and support with a focus on reform of the Social Security Disability System

<http://groups.msn.com/SocialSecurityDisabilityCoalition>

Site you can go to get your questions answered about Social Security

<http://www.severe.net/>

Links to Social Security Disability Ratings

<http://208.56.213.87/listings.html>

General Accounting Office Report Number - GAO-02-322, dtd February 2002, *Social Security Administration: Disappointing Results From SSA's Efforts to Improve the Disability Claims Process Warrant Immediate Attention*, clearly states, that based on the GAO's research we are approaching a crisis level in the process and that immediate steps must be taken to remedy the rising backlog of cases pending. This report further states that previously implemented costly changes in 10 Prototype states, and the nationwide Hearings Process Improvement Initiative implemented nationwide, are having negligible results, and in some cases, depending on which initiative you are looking at, are increasing processing times. To access this report go to the General Accounting Office site at <http://www.gao.gov>. On the left hand side of the screen you will see a search box

titled *Full Text Search*. Type in GAO-02-322 and hit enter. This will open the associate PDF file for you. The report is approximately 33 pages long.

IV. Providing Medical Evidence to the Social Security Administration for Individuals

A. Guide for Health Professionals

When an individual applies for Social Security disability benefits, we must decide whether he or she is disabled under the law. We base our decision on information you provide and other evidence, including information provided by the individual. The following guidelines will help you understand the kind of information we need.

B. Definition of Disability

Under Social Security law, an individual is considered disabled if he or she is:

-- unable to do any substantial gainful work activity because of a medical condition (or conditions), that has lasted, or can be expected to last, for at least 12 months, or that is expected to result in death;

-- or, in the case of an individual under the age of 18, if he or she suffers from any medically determinable physical or mental impairment of comparable severity.

The medical condition(s) must be shown to exist by means of medically acceptable clinical and laboratory findings. Under the law, symptoms alone cannot be the basis for a finding of disability, although the effects of symptoms may be an important factor in our decision whether a person is disabled.

If the medical evidence alone shows that a person is clearly disabled or not disabled, we decide the case on that information. Otherwise, we go on to consider other factors, such as functional capacity in light of the person's impairment(s), age, education, and work background. For a child under age 18, we generally consider the child's ability to function independently, appropriately, and effectively in an age-appropriate manner.

C. What We Need From You?

We need information from you that will help us to determine the existence, severity, and duration of the person's impairment(s).

Your report should include a thorough medical history, and all pertinent clinical and laboratory findings (both positive and negative) from your examination of the person. Copies of laboratory results should be provided if available. Also, provide the results of any mental status examination, including any psychometric testing. Longitudinal clinical records and detailed historical notes discussing the course of the disorder, including

treatment and response, are very useful for us since we are interested in the impact of the illness over a period of time.

You should also include a statement of your opinion about what work-related activities the person can still do despite his/her impairment. Tell us your opinions about both physical and mental functions and, to the extent possible, the reasons for your opinions, such as the clinical findings and/or your observations of the person. These opinions should reflect the person's abilities to perform work-related activities on a sustained basis, i.e., 8 hours/day and 5 days/week. Your descriptions of any functional limitations you noted throughout the time you treated the patient are very important. Examples of work-related functions include:

--Physical work-related functions: Walking, standing, sitting, lifting, pushing, pulling, reaching, carrying, and handling.

--Mental work-related functions: The ability to understand, remember, and carry out simple instructions, the ability to use appropriate judgment, and the ability to respond appropriately to supervision, co-workers, and usual work situations, including changes in a routine work setting.

D. The Claim Adjudication Team

Our adjudication team consists of a physician or psychologist and a specially trained disability examiner working in the disability determination services (DDS) in the State in which the claimant lives.

If the team believes there is not enough information to make a decision, they may call or write you to find out if you have the needed information. If you do not, they may ask you or, in some circumstances, an independent medical source, to provide the information by performing tests or an examination for a fee paid by the DDS.

Social Security law requires that a disabling impairment be documented by medically acceptable clinical and laboratory findings. Statements merely recounting the symptoms of the applicant or providing only a diagnosis will not establish a medical impairment for purposes of Social Security benefits. We must have reports documenting your objective clinical and laboratory findings. Thus, it is essential that you submit all objective findings available concerning your patient's condition, even if they relate to another disorder or establish that the person has a different condition.

E. LAWSUITS

1. Vaccine Lawsuit

Law offices of Shawn Khorrami
in association with Waters & Kraus
14550 Haynes Street
3rd Floor
Van Nuys, CA 91411
Tel: (818) 947-5111
Fax: (818) 947-5121
comments@khorrami.com
<http://www.testfoundation.org/gwslawsuits.htm>

The complaint alleges a causal connection between symptoms suffered by tens of thousands of Gulf War veterans, including Frank Schmuck, and the mercury-based preservative, Thimerosal, in vaccines. It charges the drug companies with, among other things: Fraudulent Misrepresentation, Fraud and Deceit, Negligence, Strict Product Liability, Illegal and deceptive business practices, and Loss of Consortium.

The defendants in the complaint include Abbott Laboratories, American Home Products, Wyeth, Aventis Pasteur, Bayer Corporation, Biopart Corporation, Glaxosmithkline, King Pharmaceuticals, Medeva Pharmaceuticals, Merck & Co., Sigma-Aldrich Crop, Spectrum Chemical Manufacturing Corp. and Stat Pharmaceuticals.

2. Companies Doing Businesses With Iraq Lawsuit

PITTS & ASSOCIATES
Attorneys at Law
8866 Gulf Freeway, Suite 117
Houston, TX 77017-6528
(713) 910-0555
(713) 910-0594 (Fax)

a. Qualifications for becoming a Client and How to become a Client

We are accepting these cases on a contingent fee basis. In other words, you will not owe us a dime if we do not recover monetary damages for you. You will also not be expected to advance court costs or litigation expenses.

We will review the application of any potential new client who meets each of the following three criteria:

Bahrain, Qatar or on a naval vessel in the northwestern Persian Gulf for any time between January 17, 1991 (the beginning of the air war) and March 14, 1991 (the last day of the nerve gas plume from Khamisiyah).

b. Symptoms

A veteran who has been assigned any percentage of disability by the Veterans Administration for any of the following signs or symptoms:

- Fatigue;
 - Signs or symptoms involving skin;
 - Headache;
 - Muscle pain;
 - Joint pain;
 - Neurologic signs or symptoms;
 - Neuropsychological signs or symptoms;
 - Signs or symptoms involving the respiratory system (upper or lower);
 - Sleep disturbances;
 - Gastrointestinal signs or symptoms;
 - Cardiovascular signs or symptoms;
 - Abnormal weight loss;
 - Menstrual disorders; or
 - Any percentage under the "undiagnosed illness compensation program for Gulf War veterans. (*Quoting 38 Code of Federal Regulations, Section 3.317*); and
- A veteran who has not been incarcerated for crime since the Gulf War.

We will also review the application of parents of any birth-defected child, born to a Gulf War veteran who was present in the Persian Gulf theater of operations anytime between January 17, 1991 and March 14, 1991.

We reserve the right to accept or reject any prospective client applications. We will try to respond with a letter either accepting or declining your case within two weeks of receiving your application. **YOU SHOULD NOT CONSIDER YOURSELF AN INDIVIDUAL CLIENT OF OUR LAW FIRMS UNLESS YOU RECEIVE A SIGNED ACCEPTANCE LETTER FROM US IN RESPONSE TO YOUR COMPLETED APPLICATION.**

In order to become a client of our law firms in this litigation, and concerning the potential claim against the frozen Iraqi assets, please do the following:

From this website, click on and print the Questionnaire, 1991 Gulf War Veteran Attorney-Client Employment Agreement, and Medical Release. (And if you are a parent of a birth defected child since the Gulf War, click and print the Questionnaire, Attorney-Client Employment Agreement and Medical Release for that.)

Fill out the forms as completely as you can and sign the paperwork.

Include a copy of the V.A. paperwork that assigns you some percentage of disability.

Alternatively, include a copy of some medical record that describes the birth defect suffered by your child born after the 1991 Gulf War.

Include a copy of your DD-214, if you have it.

Send the completed forms and copies by first class U.S. mail, or overnight mail:

NOTE: If you're a client of Spagnoletti & Co, their lawsuit has been folded into Pitts and Associates Lawsuit.

You will just need to download the questionnaire and attorney-client employment agreement and medical releases from this website. Then fill them out as well as you can, sign them, and send them, with a copy of your VA disability rating, to: Pitts & Associates, 8866 Gulf Freeway, Suite 117, Houston, TX 77017-6528. You should get a reply within about 10 days letting know you know if you have been accepted as a client or not.

Chapter 6 TABLE OF BENEFITS AND SERVICES

(a) BENEFITS AND SERVICES	TIME LIMIT	WHERE TO APPLY
Disability Compensation: VA pays monthly compensation to veterans for disabilities incurred or aggravated during military service. This benefit is not subject to federal or state income tax. <i>Entitlement is established from the date of separation if the claim is filed within one year from separation.</i> Generally, military retirement pay is reduced by any VA compensation received. Income from Special Separation Benefits (SSB) and Voluntary Separation Incentives (VSI) affects the amount of VA compensation paid.	None	Any VA office or call 1-800-827-1000 or file at www.va.gov
Disability Pension: This income-based benefit is paid to veterans with honorable war-time service who are permanently and totally disabled due to non service-connection disability (or age 65 or older).	None	Same as above
Medical: VA provides a wide range of health care services to veterans including treatment for military sexual trauma, and for conditions possibly related to exposure to Agent Orange, ionizing radiation, and other environmental hazards in the Persian Gulf. Generally, veterans must be enrolled in VA's Health Care System to receive care. Combat Veterans - VA will provide combat veterans free health care for any illness possibly associated with service against a hostile force in a war after the Gulf War or during a period of hostility after November 11, 1998.	None Two years from release from active duty	Any VA medical facility or call 1-877-222-8387 or file at www.va.gov
Dental: Veterans may receive one-time dental treatment if they were not provided treatment within 90 days before separation from active duty. The time limit does not apply to veterans with dental conditions resulting from service-connected wounds or injuries.	90 days from separation	Same as above
Education and Training: Up to 36 months of benefits for <ul style="list-style-type: none"> • Montgomery GI Bill – Active Duty (Chapter 30), or • Veterans Educational Assistance Program (VEAP) (Chapter 32), or • Montgomery GI Bill – Selected Reserve (Chapter 1606) 	10 years from release from last period of active duty. Limited extensions available 10 years from the date of eligibility for the program, or until released from the Selected Reserve or National Guard. 14 years if eligibility began on or after October 1, 1992. If activated under title 10, eligibility period is extended by time on active duty plus 4 months. Separate extension for each activation. Extension not available if activated under title 32	Any VA office or call 1-800-442-4551 or file at www.va.gov
Home Loan: Veterans with qualifying service are eligible for VA home loan services including guaranteed loans for the purchase of a home, manufactured home, manufactured home and lot, certain types of condominiums, or to build, repair, and improve homes. This benefit may be used to refinance an existing home loan. Certain disabled veterans can receive grants to have their homes specially adapted to their needs. Native Americans living on Trust Land may qualify for a direct home loan.	None	Any VA office or call 1-800-827-1000
Life Insurance: <ul style="list-style-type: none"> • SGLI (Servicemembers' Group Life Insurance) is low-cost life 	Coverage continues for 120 days from date of separation, or up to one	

<p>insurance for servicemembers and reservists. It is available in \$10,000 increments up to a maximum of \$250,000. SGLI coverage begins when the servicemember enters service.</p> <ul style="list-style-type: none"> • VGLI (Veterans' Group Life Insurance) is renewable term life insurance for veterans. It is available in amounts up to \$250,000 but not to exceed the amount of SGLI coverage in force at the time of the servicemember's separation from service. Premiums are age-based. • FGLI (Family Group Life Insurance) is low cost life insurance extended to the spouse and children of servicemembers insured under SGLI. Spousal coverage is available up to a maximum of \$100,000, but may not exceed the servicemember's coverage amount. Dependent children are automatically covered for \$10,000 for which there is no cost. • SDVI (Service-Disabled Veterans' Insurance), also called "RH" insurance, is life insurance for service-disabled veterans. The basic coverage is \$10,000. A \$20,000 supplemental policy is available if premium payments for the basic policy are waived due to total disability. <p>VMLI (Veterans' Mortgage Life Insurance) is mortgage protection insurance issued to those severely disabled veterans who have received grants for Specially Adapted Housing from VA. Maximum coverage of \$90,000.</p>	<p>year if totally disabled at the time of separation from service</p> <p>Must apply within 120 days of separation, or 1 year and 120 days if proof of good health is provided</p> <p>Coverage terminates 120 days after servicemember is released from service. Spouse may convert policy to a commercial policy</p> <p>For basic must apply within two years from date of notification of service-connected disability. For supplemental must apply within one year of approval of waiver of premiums.</p> <p>Must apply before the age of 70</p>	<p>Any VA office or call 1-800-669-8477</p>
<p>Reemployment: The Department of Labor's web site www.dol.gov contains information on employment and reemployment rights of members of the uniformed services.</p>	<p>For military service over 180 days, must apply for reemployment with employer within 90 days after separation. Shorter periods to apply if service is less than 180 days</p>	<p>Former employer</p>
<p>Unemployment Compensation: The Unemployment Compensation for Ex-servicemembers program is administered by the States as agents of the Federal government. The Department of Labor's web site www.dol.gov contains links for each state's benefits, including the District of Columbia and Puerto Rico.</p>	<p>Limited time</p>	<p>State Employment Office (bring your DD-214)</p>

For More Information Call 1-800-827-1000, Or Visit www.va.gov

Chapter 7 FORMS AND REFERENCES

DOD Worldwide TRICARE Information Center (Toll-Free) 1-888-363-5433 or 1-877-363-6337. Operating Hours: Monday through Friday, 0800 to 2000 (EST) (excluding federal holidays). Please be aware that calls are answered in English only. They can be emailed at TRICARE_Help@amedd.army.mil or QUESTIONS@tma.osd.mil. The TRICARE web site is <http://www.tricare.osd.mil/overseas>

TRICARE now has an International SOS. This benefit will arrange routine, urgent and emergency health care services for sponsors and family members with health care providers who are approved and certified by TRICARE. International SOS will also arrange urgent or emergency care for active duty personnel who are temporarily assigned or deployed in a remote location overseas, or traveling in an authorized leave status. Dental care is available under this contract for active duty personnel only.

I. SPONSORS AND AUTHORS

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